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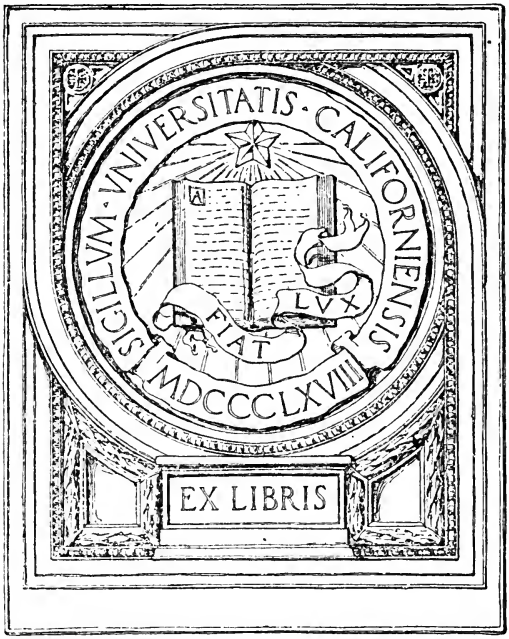

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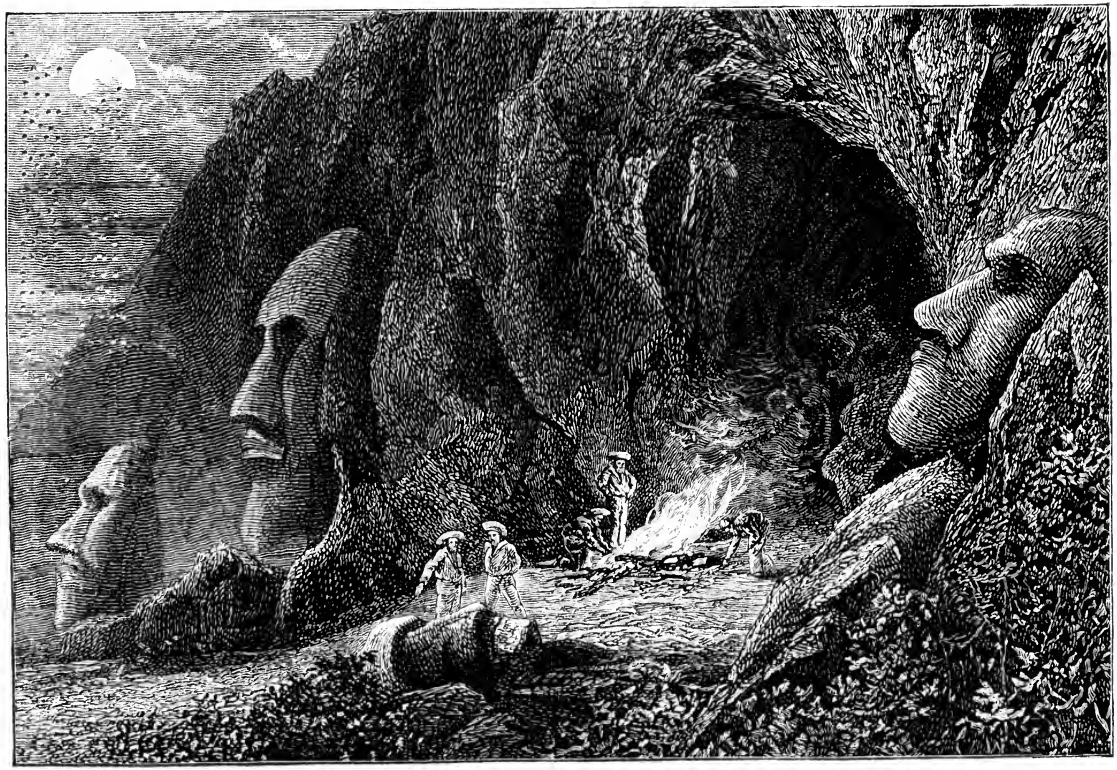

THE COLOSSAL STONE STATUES AT EASTER ISLAND.

[*See p.* 213.

JOTTINGS FROM THE PACIFIC

BY

W. WYATT GILL B.A.

AUTHOR OF "LIFE IN THE SOUTHERN ISLES,"
JOINT AUTHOR OF "WORK AND ADVENTURE IN NEW GUINEA."

WITH SIXTEEN ILLUSTRATIONS.

THE RELIGIOUS TRACT SOCIETY

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LIST OF ILLUSTRATIONS.

	PAGE
THE COLOSSAL STONE STATUES AT EASTERN ISLAND	*Frontispiece*
A CORAL ISLAND IN THE SOUTH PACIFIC	10
A CORAL REEF	11
NATIVE WORSHIPPING A POST	15
THE ISLAND OF ATIU	40
SOUTH SEA ISLAND SCENERY (OPOA, RAIATIA)	49
A RAROTONGAN VILLAGE	72
BANYAN TREE	124
OLD SWORD FISH	137
YOUNG SWORD FISH	137
THE SUN-FISH	143
LOPAPHUS COCCOPHAGUS, OR COCOA-EATING LOPAPHUS	159
THE ROBBER-CRAB	165
SCREW-PINE	184
FAGRÆA BERTERIANA (FRUIT)	190
A SOLITARY FISHER	212

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CONTENTS.

PART I.

DAYS FROM HOME.

CHAP.		PAGE
I.	NIUTAO	11
II.	THE GOSPEL REJECTED	19
III.	A DAY ON A DESOLATE ISLAND	28
IV.	PALMERSTON'S ISLAND	33
V.	A SUNDAY AT ATIU	39
VI.	MAUKE; OR, A REMNANT SAVED	48
VII.	A HOLIDAY EXCURSION	61

PART II.

BIBLE TRUTHS ILLUSTRATED BY NATIVE PREACHERS.

I.	NATIVE PREACHING	73
II.	BIBLE TRUTHS ILLUSTRATED	76
III.	TARAAERE'S STORY	119

PART III.

ZOOLOGICAL AND BOTANICAL NOTES.

SECT.		
I.	ZOOLOGICAL NOTES	125
II.	BOTANICAL NOTES	170

PART IV.

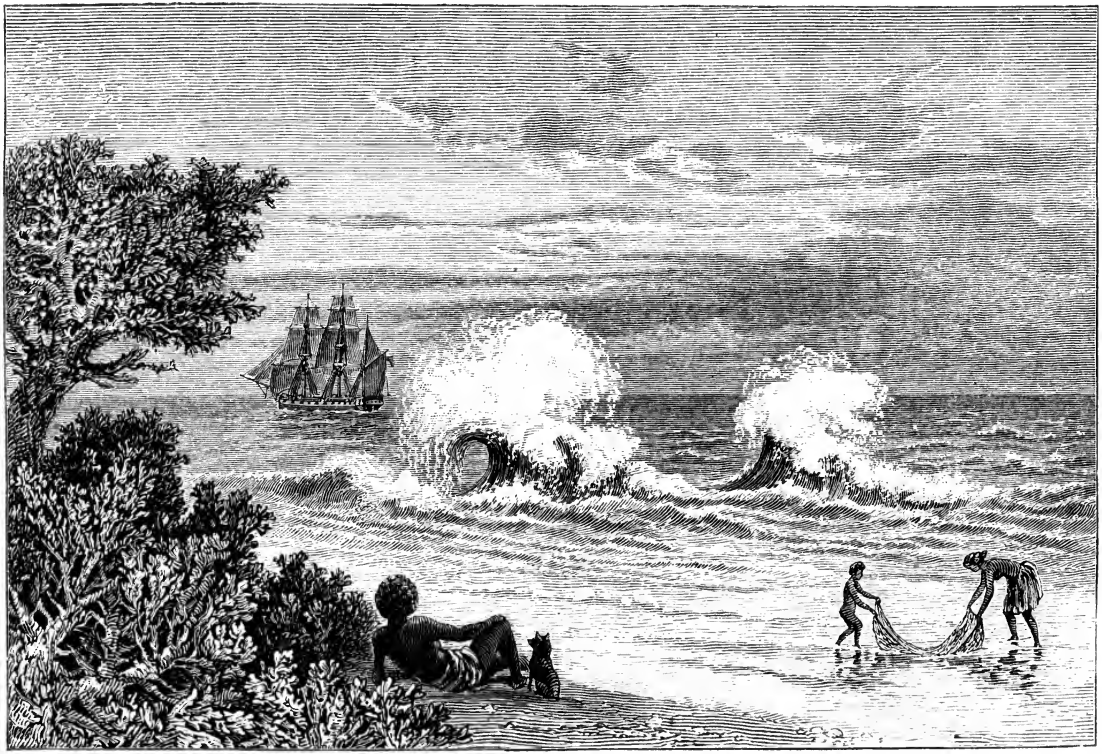
MISCELLANEA.

	PAGE
Statues or Stone-gods of Easter Island	213
Disappearance of Islands	215
Moonstruck	215
South Sea Island Riddles	217
The Sea-Horse	221
Reckoning by Nights	222
Prayer upon the Extraction of a Child's Tooth	222
Fish Diet	223
Stone Adzes in the Pacific	223
A Heathen's Idea of Prayer	225
From the Coral Reef to Heaven	225
Intended Human Sacrifices	226
Makitaka's Human Sacrifices to Rongo	230
A Polynesian Pastor	234
Tapairu-ariki, or farotonga	237
Death of a Christian Chief	239
Eclipse of the Sun as seen in the South Seas	240
Tahiti	240
White Cannibals	241
Old Habits	242
A Remininscence	243
Prayer	244

INDEX 245

PART I.

DAYS FROM HOME.



A CORAL ISLAND IN THE SOUTH PACIFIC.

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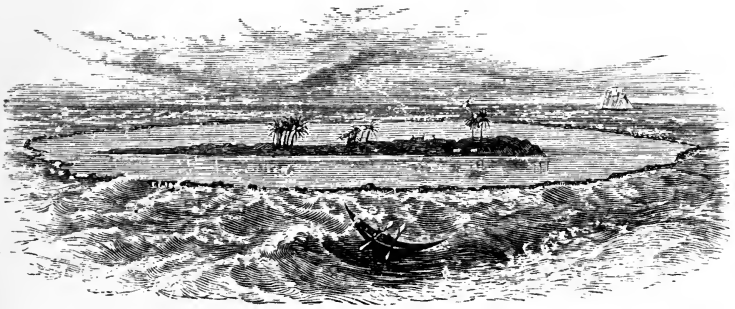


A CORAL REEF.

Days from Home.

CHAPTER I.

NIUTAO.

Seven hundred and fifty miles north-west of Samoa is the little coral island of Niutao, resting like a graceful ringlet on the broad bosom of the blue Pacific. Niutao etymologically signifies, 'baked-cocoa-nut.' The climate is intensely hot and dry, the island being in lat. 6° 8′ S. Rain seldom falls in this part of the Pacific.

Three years previous to my visit, two native evangelists from Samoa had been located on this island. At that time out of a population of four hundred and

seventeen, only six or seven were favourable to Christianity. The natives of Niutao were accustomed to worship their heathen deities in a *marae* in the centre of the village. Of this great *marae* only one stone is now left, representing Tangaloa (Tangaroa in the Hervey Group, Ta'aroa in the Tahitian, Tanaroa in the Sandwich Islands), god of heaven and principal deity of Polynesia. Tangaloa is merely an upright slab, not unlike a head-stone in an English graveyard.

In August of 1872, in company with a valued brother missionary, I spent a pleasant day on this *atoll*. Unlike several of the nine islands constituting the Ellice Group, there is no opening in the reef to admit a vessel or boat into the central lagoon. A fleet of war-ships might sail into the magnificent lagoon of the neighbouring island of Funafuti, and anchor in safety. Approaching the reef of Niutao as near as was prudent in the ship's boat, we were borne one at a time in a canoe on the foaming crest of a huge wave to the external ledge of jagged coral, where the teachers gave us a joyous welcome. A few moments, and we were soon inside a comfortable mission-house, reflecting infinite credit upon teachers and people.

The natives of Niutao had nearly all become nominal Christians under the teaching of these evangelists. Only forty still adhered to their ancient faith, and these were easily distinguished by a single sacred leaf of the cocoa-nut worn on the left arm. The king's palace, consisting of one immense room, had been converted into a church, the flooring being of snowy sea-worn coral. On Sunday each family were accustomed to bring a mat and squat upon it tailor fashion. The building was crowded with attentive worshippers;

the services were conducted by the teachers in turn. A log of wood, hollowed out, was beaten as a gong to summon the congregation to worship on the Sabbath, and the children to school on week days.

The Lord's day is strictly observed as a day of rest and worship. A large proportion of the adult population can read the Samoan New Testament. All the books left the previous year had been sold and paid for. A number of additional Testaments and Psalms, with other good books, were left for sale.

There were eleven candidates for baptism and church-fellowship. As nine of these individuals seemed to be intelligent and pious, it was resolved that on the following Sabbath they should be formed into the nucleus of a Christian Church. It may be interesting to the reader to learn what is used as a substitute for bread and wine in celebrating the ordinance of the Lord's Supper in such out-of-the-way places as in Niutao. The natural wine of the country is the sweet liquid of the cocoa-nut; for bread a substitute is found in the white pith of the old cocoa-nut, when it has begun to sprout; and these are here the substitutes for the bread and wine. In some islands bread-fruit is used; in others taro. Thus less attention is directed to the symbol, and more to the thing signified.

The natives of Niutao subsist on the fruit of the pandanus, cocoa-nuts, and fish. With this meagre diet they are perfectly contented and healthy. The men wear long, straight hair. The women wear only a girdle of leaves, reaching from the waist to the knees. We saw no European clothing whatever. Men, women, and children crowded round the teachers' house

throughout the forepart of the day, so that privacy was out of the question. About noon a repast was spread for us, consisting of cocoa-nuts, cooked robber-crabs of enormous size, and a fowl.

These teachers daily received an allowance of cocoa-nuts, but not sufficient to prevent their little ones sometimes from crying of hunger. As they are not permitted by the chiefs to cultivate land, their only resource is the ocean. Flying-fish and bonita are luckily very abundant; and these good men, being expert fishermen, rarely come home without a plentiful supply.

The houses of these islanders consist of two stories, the upper one being used as a store for their only wealth—old cocoa-nuts; the ground floor is invariably occupied by the family.

Half a mile distant in the bush is their ancient burial-ground. Adjoining it is their pantheon, consisting of an oval low enclosure, composed of flat stones, some higher than others, each representing a distinct divinity; so that the sacred men standing inside the enclosure—the people, of course, outside—could worship all the gods at once! The place is now deserted, save that the islanders still bury their dead in the neighbourhood.

We took a long walk; we found it monotonous, as the island is but a dead level, like the flooring of a room. Here vegetates a race who have never seen and, until very recently, had never heard of a hill![1] The

[1] On one occasion, spending a night ashore on an island of similar formation, I described to the natives the mountains of Europe. 'By-the-bye,' I remarked, 'you have never seen a mountain.' 'Oh yes, we have; there is one on this island.' 'Where?' I asked.

island is one immense grove of cocoa-palms, with here and there noble *Calophylla inophylla* covered with fragrant flowers. We noticed for the first time on the cocoa-palm a curious disease, in the form of a pendulous excrescence, reminding one of a newly-settled swarm of bees.

Returning to the village, we entered an idol-house. The god (will it be credited?) is *the central side post*, stouter than the rest, and crooked! Like the other

NATIVE WORSHIPPING A POST.

posts, this god helps to sustain the roof, and yet is an object of daily worship! To the crooked post—utterly destitute of ornament—three green cocoa-nuts and a sacred leaflet were offered morning and evening. On these occasions the worshipper (with whom we con-

---

'To-morrow we will show you.' Next morning I was conducted to a hillock twenty feet high, the highest part of the island, which these natives call 'a mountain.'

versed) goes through his incantations, and, husking the nuts with a stick kept for the purpose, drinks the water and eats the kernel, and then puts newly-plucked nuts in their place! This is all supposed to be done with the permission of the god. Besides, the divinity is believed to have devoured the *essence*, so that only the refuse is in reality left! Like the dogma of transubstantiation nearer home, this doctrine requires a considerable amount of faith. Each new act of worship necessitates the tying of a fresh leaf round the post, and another round the arm of the worshipper. Four old cocoa-nuts lay at the foot of this queer post-god.

In another idol-house we saw, on a swinging tray, a smooth round pebble worshipped as a god. Offerings of green cocoa-nuts lay near it, with the sacred leaflet. We thought of the words of Isaiah, 'Among the *smooth stones* of the stream is thy portion; they, they are thy lot: even to them hast thou poured a drink offering—thou hast offered a meat offering' (lvii. 6).

Near the teachers' house is an immense well, the sides of which are admirably built up with stones. At the bottom is a series of little holes, out of which the water is whisked (as we saw at Vaitupu) in calabashes suspended from what looks like a fishing-rod. Some years ago two Englishmen were murdered by these islanders for various acts of oppression. The offence which sealed their fate was *bathing* in this well, which supplies the villagers with drinking water.

In heathenism it was their custom in seasons of scarcity to make war on certain families. The conquered—men, women, and children—were either slain, or cruelly driven to sea in canoes, without food or

water, to perish. As in the other islands of the group, the ancient rule was to rear only two children in each family. The life of the third *might be* redeemed; the rest were put to death as soon as born. The reason assigned for this inhuman practice was the fear of over-population.

It is amusing to hear these islanders when counting say *atoa*, '*all*,' instead of 'ten,' meaning of course, '*all* the fingers.' This obtains throughout the group They are fond of taming the frigate-bird (*Atagen aquila*) or man-of-war-bird. A high perch is built near the sea, and the bird secured to it by a long string. It lives by robbing other birds of their lawful prey; but when pressed by hunger it will snatch up fish leaping out of the sea to escape from their finny foes.

The native pastors on most of the islands—lying about sixty miles apart—of the Ellice Group correspond with each other by means of the frigate-bird. The note is concealed in a bit of reed and tied to one of the wings. In the olden times pearl fish-hooks were in this way sent from one island to another. During a cyclone the frigate-bird flies so low that it is easily knocked down by a long stick. When sitting on its solitary white egg the mother bird will allow herself to be seized by the hand. Its long black feathers were formerly in great request for head-dresses.

Some four or five years ago a common sailor settled on Niutao, as missionary on his own account. He won over the chief, and then endeavoured to convert the heathen with a loaded revolver and some bowie knives. He failed, and in disgust left the island.

When my Samoan brethren landed the present teachers, the natives were naturally prejudiced against Christianity. The chief countenanced the teachers, and asked them what should be done with the heathen. 'Shall they be compelled to *lotu?*' 'No,' was the answer. '*Let us persuade them; but let there be no compulsion of any kind.*' In this Christ-like spirit these brown men are winning a new crown for their Divine Master.

CHAPTER II.

THE GOSPEL REJECTED.

THIRTY miles west of Niutao lies the island of Nanomanga, physically similar to its neighbour, but morally a perfect contrast. Through a slight rent in the reef, we landed in the ship's boat early one afternoon, intending to pass the night ashore, but these wild heathen would on no account permit us to do so. Timoteo, the teacher, who for ten months had been on the island, met us with a sad face on the beach. Amid great opposition we made our way to his house, about fifty yards off. A charmed circle was drawn round the beach, beyond which none of our party were permitted to wander. We were the first visitors fortunate enough to escape being 'devilled' —*i.e.* detention for hours in a broiling sun, whilst the heathen performed incantations to prevent the introduction of disease.

Not an adherent had been gained by Timoteo; their much-feared king Atupa having forbidden his subjects to become Christians under pain of being miserably suffocated in the mud of the deep lagoon. The teacher himself had been ordered to leave on the return of the mission ship.

In 1862 Timoteo, then a heathen, was one of sixty natives who drifted to Samoa from Fakaofo—a distance of three hundred miles. The Protestants of Apia collected 500 dollars' worth of clothing for them; and the entire party, with their huge canoes, were conveyed back to their own islands in the John Williams free of expense. Timoteo afterwards gave up his idols, became a Christian indeed, and, after going through a course of training at Malua, is now a preacher of the Gospel. Christianity is ever young, and achieving new triumphs.

On Timoteo's landing on Nanomanga, as soon as the mission bark disappeared in the horizon, the heathen appropriated to their own use the principal part of his property. He took joyfully the spoiling of his goods, hoping to win these savages over to the Gospel. But when the Nanomangans found that Christianity frowned upon their obscene night-dances and the universal profligacy which obtains amongst these 'children of the sun,' they resolved to get rid of Timoteo and his unpleasant doctrines. The rite of marriage was unknown on Nanomanga and the sister island Nanomea.

We requested the three principal chiefs (for Atupa was ill) to permit Timoteo to stay on the island until the return of the John Williams next year, as we were bound to New Guinea, and were crowded with passengers. They replied, 'We will to-night consult the gods on the point.'

A number of heathen accompanied us on board We gave them food and clothing. We soon found that they were immoderately fond of tobacco. They seemed to be much attached to their native soil; for

once, when we 'wore ship,' and their island was invisible from where they were squatting, the despairing cry arose, 'Nanomanga is gone!' When I took them to the other side of the ship, and showed them their island, the poor fellows actually clapped their hands with joy. They had heard how Fijian slave vessels had depopulated several neighbouring islands.

It was one of those wonderful moonlight nights so common in the tropics, but unknown in England. The southern constellations stood out like brilliants in the azure vault. A delicious dreaminess stole over the senses as one gazed alternately on sea and shore.

As evening deepened into night, the heathen became quite friendly and chatty. I remarked, 'Jehovah made the sky, the ocean, and all men.' The prompt reply was, 'Very likely your Jehovah made *you* and *your* land; but the good gods Maumau and Foilangi' (their ancestors who came from Samoa) 'made us and Nanomanga.' It was curious to hear them speak of their deified ancestors as 'the good gods.' They worship shooting-stars and rainbows; but the principal objects of adoration are the *skulls and jawbones of the dead!* When pressed to embrace Christianity, they affectingly said, 'We know that your God is stronger than ours; but we love darkness. To us darkness is good, light is bad.' We thought of the inspired declaration, 'And this is the condemnation, that light is come into the world, and men loved darkness rather than light, because their deeds were evil. For every one that doeth evil hateth the light, neither cometh to the light, lest his deeds should be reproved' (John iii. 19, 20).

A chief went over the ship. To his astonishment, when standing in front of the pier-glass in the saloon, he perceived a man in Nanomangan costume looking at him. He asked his name, and politely bowed to the shadow, receiving, of course, a bow in return. No reply, however, being made to his inquiry, he turned to those in the saloon to know 'who that fellow was?' We found it very difficult to convince him that no one was hiding behind the glass.

Next morning we went ashore with our visitors to learn the decree of the oracle. Crowds of men ran to the beach to meet us, besmeared with ashes mixed with oil, each wearing the sacred leaflet on the left arm, with necklaces of flowers. In this costume they had been dancing and performing their wild incantations to the gods during the night. The response of the oracle was, that no foreign god or instructor should dwell on the land sacred to Maumau and Foilangi. After some difficulty it was agreed that Timoteo might remain on Nanomanga for one year more.

Hoping to produce a favourable impression, an interesting letter from the only daughter of Atupa was read to the chiefs and to her brother. She had married the son of the king of Vaitupu, and with her husband had heartily embraced the Gospel. Both are inmates of the institution at Malua for training a native ministry. When the contents of the letter were conveyed to Atupa, he was exceedingly enraged that his daughter should forsake the gods of her ancestors, and should advise him to do the same.

But the letter won upon the brother. In his company we strolled through the village, and saw three temples. In one of these temples, on a large

swinging tray, we counted eleven human skulls; on another tray, nine. It was to accommodate these skulls that the temples were built. It is the disgusting custom in Nanomanga, when a great chief or much-loved head of a family dies, to bury the corpse, but, on the third day, the head is removed, and the flesh gnawed off and eaten raw with cocoa-nut by the sacred men. The clean skull with the jawbone are then put on a tray in the appropriate temple, and thenceforth become objects of worship.

I called on King Atupa. He was reclining on a mat, with an ominous cough, and seemingly far gone in consumption. Over his head hung the thigh-bone of a man, quite fresh, and picked clean. He begged a few yams, for none grew on this barren island. The *buraka*, a coarse kind of taro growing on Nanomanga, was too tough for his teeth. A goodly supply of yams was that day sent him as a present from our ship. It was sad to see the aged king passing away in utter darkness, scornfully rejecting the proffered light. We were told that, at death, *his* skull would be added to the tray of gods in the adjoining temple.

The thatch of Atupa's house is merely the leaf of the cocoa-nut, which is very pervious to rain; whilst the idol-temples are well covered with the leaf of the *Pandanus odoratissimus*—the finest thatch in the world. We suggested to a chief that the king's dwelling might have a better thatch. He replied, 'The king's house is thatched with cocoa-nut leaves, not with pandanus, because he is but a mortal!' Yet, absurdly enough, this same mortal, after death, is worshipped as a god! The same feeling existed formerly on Mangaia with reference to this celebrated thatch-tree, with this

difference, the chiefs being regarded as sacred men, might have their great dwellings thatched with the pandanus leaf after the idol-temples had been attended to. So of a re-thatching: temples first, chiefs' houses afterwards.

In pleasing contrast with the above, Dr. Turner of Samoa thus writes in 1877 :—

'It was only nine months since the present teacher Ioane was landed here, and for the *third* time an effort made to introduce the Gospel. We approached the island, therefore, with no small anxiety to know whether the young man and his wife were safe, and whether it had pleased God to crown his mission with success. The first canoes answered to his name. One native said in broken English, 'He good man;' and by 11.30 the 'good man' stepped over the ship's side himself, shook hands, thanked God, and proceeded to give us the cheering news that heathenism on the island had received its death-blow, that the altars in the two temples were broken down, that the former ceremonies on the arrival of strangers were at an end, that a chapel seventy feet by thirty had been erected, and that one hundred and fifty, including the king and a number of the principal chiefs, had become Christians. This was all confirmed when we went on shore, and the results of this young man's humble, prudent, prayerful, and earnest work, by God's blessing, are truly wonderful. He is the younger brother of Pastor Tema, of Funafuti, and both are the sons of one of our senior native pastors in Samoa. On his first Sabbath on shore in September last Ioane had twenty-four to hear him. On the second Sabbath he begged them to give up working on the Lord's day, and this they

did. On the following Friday, at a conversational meeting with them about their gods, he said that their sacred pillar was merely a piece of wood made by God, and perishable, but that the true God never dies. The fish which they revered were made by God for men to eat, and it was the same with their sacred birds, such as the areva or cuckoo. And as for the shooting-star, it was not a god, but merely a passing light in the night, and, like all the heavenly lights, made and controlled by God. The people were much impressed by what he said. At midnight he was waked up by two of the chiefs, who asked him to rise and go with them. They took him to the bush away from the hearing of everybody, and there they talked. They said they had made up their minds to turn over, but their great difficulty was how to get rid of the relics or gods. He said he had no fear of them, and was ready to burn, or bury, or remove them in any way they liked. This was all they wanted, and they decided to let him be the executioner on the following day.

'The day came; five of the chiefs took their seats, surrounded by all the people, and Ioane was sent for. The first thing to be done was to remove from the necks of these men the sacred necklaces which were supposed to link them on to the special protection of the gods. It was considered death for any one to remove them, but Ioane stepped forward and broke the fragile network—the people staring in astonishment, and expecting every moment to see him fall down dead. The necklaces were removed, the spell was broken, the weakness of the gods manifest. "And now," said he, "let us pray;" and there and then he led their thoughts in prayer to the true God. He was

then directed to go and break down the altars in the temples, remove the skulls and stone idols, and also the clubs and spears of the gods. Every eye followed him, many still looking upon him as a dead man. In went his axe to the two pillars sacred to the "shooting-star" god. He handled carefully the skulls as he took them from their places, and respectfully covered them with a piece of Samoan native cloth. Some of the clubs and spears from the armoury of the gods came in useful as a railing for the court house, which they decided to use as a temporary chapel. Ioane proposed one of the temples, but did not urge it, and next day he had a congregation of ninety-eight—all professing by their appearance there that Lord's day that they had given up heathenism. On the Monday they proceeded with the burial of the skulls and other sacred relics from the temples and family skull-houses. Some of the new converts helped Ioane, and in that grave of heathenism, dug in the village *malae*, or place of public meeting, they laid one hundred and thirty-four skulls, one wooden idol, two stone idols, fourteen shell trumpets, used in calling assemblies, and a lot of clubs and spears used only by order of the gods. These skulls were kept on the temple and family altars; cocoa-nuts and other food were daily taken and laid before them; and in cases of sickness in the family or settlement they prayed to the spirits who were supposed still to hover around these skulls ready to answer a call for help.

'On the afternoon of the day I went on shore. We had a meeting, at which I ordained Ioane to the work of the ministry. The children were also assembled, and their parents looked on as I examined them and

showed my diagrams. Thirteen of the children can read well. The people have built Ioane a house fronting the sea, and a chapel close by, 70 ft. by 30 ft. Of the inhabitants one hundred and fifty are Christian, and eighty-six heathen.'

CHAPTER III.

A DAY ON A DESOLATE ISLAND.

On my first voyage to Danger Island, we sighted Nassau, a complete coral island, just a mile and a half in length, and about fifty feet above the ocean level. As we neared land, vast flocks of sea-fowl came hovering over our bark, attracted by the novel sight. Several frigate-birds (*Atagen aquila*) settled in the rigging, and were caught by the sailors. The islet seemed a mass of vegetation of exceeding beauty rising out of the bosom of the ocean. The prevailing timber attains to a vast height, thus giving to the passer-by the impression that the interior is much higher than it really is.

After coasting round a considerable part of the island, in the vain hope of discovering a good opening for the boat, the sight of a ruined hut on the north side determined the captain to attempt a landing opposite to it. We went ashore with a picked native crew, taking with us a sealed bottle containing a slip of paper with the date of our visit, name of the vessel, &c., also thirty-seven cocoa-nuts, to plant for the benefit of future voyagers, some fowls, and a variety of useful seeds. We were soon close to the very jagged fringing

reef, against which the ocean beats with terrible violence. The captain now directed four natives to swim ashore, to hold the boat as soon as it might touch the coral. During a momentary lull, we darted through the surf; but, to our dismay, the captain, who held the steering oar, was hurled into the seething foam. However, he was soon fished out again, not much the worse for the mishap. Our first thought was to haul our boat beyond the reach of the surf. We then walked across the reef (which was barely covered with water) to look at the ruined hut close to the hot sandy beach. It seems that a party of Manihiki natives, six men and one woman, drifted ashore at this spot some two or three years previously. When on their way to Rakaanga, adverse winds drove them out of their course, so that they were thankful to sight Nassau and find a temporary resting-place. This hut was their home. Close by was their store-house, inside of which was a great heap of pandanus drupes growing vigorously. A little way beyond stood their little church, with a flooring of snow-white pebbles, and neatly ornamented with flat stones set on edge. Three sides of the interior were provided with seats, obtained by splitting part of the great canoe that bore them to this desolate spot. A portion of the same canoe was planted upright in the sand as a pulpit. With no small emotion I stood in that primitive pulpit and figured to myself the swarthy worshippers, who for nearly two years met here three times each Sabbath, and every week-day morning at break of day, to adore the One Living and True God, of whom, eight years previously, they were utterly ignorant. A neat grave marked the last resting-place

of one of their number; the others we subsequently met on Rakaanga, and heard them describe their intense joy when they were removed. All that they had to subsist upon was robber-crabs, fish, of which there was abundance, and pandanus drupes; with an occasional taste of a cocoa-nut from the only fruit-bearing tree then on the island.

We now became busy planting our cocoa-nuts at proper intervals, and sowing our orange and papaw-apple seeds where they were most likely to grow. The fowls made themselves at home at once. But the sight of rows of robber-crabs asleep on the branches of neighbouring trees made us doubtful as to their safety; a fowl on a nest is no match for a fierce robber-crab. Meantime our captain cut the name of the John Williams in the bark of a lofty tree. We then explored the island, and found it to be perfectly round and without a lagoon. There appeared to be few insects. A slight breeze that swept through the dense forest on that terribly hot[1] day was extremely grateful. We found no water; but it was evident that plenty could be obtained by digging. The well used by the Manihikians had doubtless been filled up with sand. We slaked our thirst with 'the milk' of young nuts from the cocoa-nut tree already referred to. It was interesting to find oneself in a primeval forest of the tropics. The first plant that meets the eye on landing is the shrubby *Scævola*, with its small white flowers, apparently imperfect, and light green succulent leaves. A species of heliotrope attracts the European with its delicious fragrance. The *Tournefortia*, which on most islands is a shrub some five or six feet high, here

[1] Nassau is in 11° 30′ S., 165° 20′ W., long.

becomes a tree sometimes measuring three yards in circumference. The flowers of the *Tournefortia* are blue; its downy grey leaves are of wondrous beauty. A myrtaceous tree, full of turpentine,[1] takes the place of the iron-wood of the volcanic islands. The *Cordia Rumphii*, valuable for timber, grows freely. Intermixed with these littoral plants and trees is the *Pandanus odoratissimus*, with its aerial roots and abundant fruits. At the back of these are lofty forest trees, consisting chiefly of two species of *Hernandia*, with here and there a *Guettarda speciosa*, or a far-spreading *Calophyllum inophyllum*. One of the latter when measured proved to be 30 feet in circumference. Everywhere around lay trunks of trees that had fallen of sheer old age, covered with masses of fern, and furnishing fine black mould for future inhabitants to utilise.

Late in the afternoon we got back to our good ship, with several baskets of robber-crabs and fish.

This visit to Nassau was paid in 1862, in the futile hope of finding a permanent location for the then starving Penrhyn Islanders. In 1875 the John Williams touched at Nassau, and obtained a good supply of cocoa-nuts, the fruit of those planted in 1862. About a hundred nuts were carefully planted by Captain Turpie. Although Nassau had evidently been unvisited during the intervening years, there was no trace of our fowls or the numerous seeds we had planted. In 1881 I again saw this pretty little island, and found that an American captain had taken possession of it. The central portion of the forest had been cleared away to make room for 14,000 young cocoa-nut trees, now

[1] It burns green. It is adapted for engraving.

beginning to bear fruit. The object in view is the manufacture of copra. Sweet potatoes, taro, bananas, and bread-fruit are now growing in favourable localities. A few natives of Danger Island in charge of a white man constitute the sole population at present. No stone adzes have been discovered on this pretty coral islet, which has now become a valuable private property, and soon will be capable of sustaining a considerable native population.

In a similar way hundreds of *atolls* in the Pacific have become the abode of myriads of human beings.

CHAPTER IV.

PALMERSTON'S ISLAND.

I SHALL not easily forget a day spent in strange society on Palmerston's, a low coral island lying in lat. 18° 4′ S., and long. 163° 10′ W. It is the westernmost island of the Hervey group. Although only two hundred miles from Aitutaki, and right in the track of the south-east trades, it was until lately uninhabited.[1] Its present population is thirty-seven, but it is capable of sustaining a native population of several hundreds.

It was on one of those cloudless days for which the Pacific is justly famous that we first saw the island. Dawn revealed low fringes of palms, apparently growing out of the sea at the edge of the horizon. After a while a long line of snowy breakers and the yellow sandy beach beyond, glowing in the sun, became visible. Thirteen islets, only a few feet above the level of the blue Pacific, enclose a lagoon in the shape of an irregular circle, five miles in diameter. Were there a sufficiently wide entrance into it, the navies of the world might anchor in safety within. These islets, so well defended by the coral reef, are evidently formed by the accumulation of sand and coral débris thrown up by

[1] It was known, however, under the name 'Avarau.'

the action of old Ocean. There is a slight sprinkling of blackish mould composed of decayed vegetable matter. It is remarkable that so large an *atoll* should be found in such high latitudes. As we approach the equator, this becomes the prevailing type of island. The reason is obvious, the warmer the ocean water, the more rapid is the work of the coral zoophytes.

Palmerston's Island was discovered by Captain Cook in 1774, on his second voyage. On his third and last voyage, just a century ago, the great navigator landed on the two southern islets to get fodder for his perishing cattle. Later on, the mutineers of the Bounty touched here, but did not care to make it their home after their pleasant experiences at Tahiti.

About 1862 an Englishman—one of those waifs so common in the Pacific—after years of wandering amongst the Line Islands, settled down here. He brought with him three wives and several natives to take possession of the island and to dry the kernel of the cocoa-nut for exportation to Europe. In 1777, Cook in two days carried off twelve hundred nuts, remarking that on one islet the trees required to be thinned out. To our eyes all the islets seemed to be a succession of cocoa-nut groves richly laden with fruit. M—— has planted eighty thousand cocoa-nuts during his occupation of the island. Bêche-de-mer is largely collected here for the Chinese market. These people lived on in virtual heathenism until a few months since, when the accidental (shall we not rather say, *providential?*) visit of a Christian chief and deacon led M—— to think it desirable to secure some means of religious instruction and secular education for the young people, several of whom are verging on maturity.

An application was made for a trained native teacher and evangelist, and a promise given that his stipend and food should be supplied. Under these circumstances it was resolved to send a teacher and his wife to Palmerston's for twelve months, to test the sincerity of these professions, and to endeavour to reform the morals of this infant community.

The little hamlet on the south can be seen a long way out to sea. As we approached, a boat came off to the John Williams, with M——. He is a short, well-set man of about sixty years; very active, but with an uneasy expression of countenance. After exchanging a few words, we in our own boat, and M —— and his boys in their boat, were sailing towards the settlement. There are several excellent boat entrances into the placid waters of the lagoon; M—— took one, we the other. Just as we were entering, a large turtle in alarm suddenly dived to the bottom, but even there was distinctly visible. Inside the breakers the place seemed alive with fish of many and beautiful hues. As the boat made its way through these unfrequented waters, large blue tesselated parrot fish (*Scarus harid*) rushed away on either side. The brilliant mid-day sun disclosed the pleasing varieties of coral growing in patches at the bottom. Some were globular, others branching most elegantly, others undulating, with tints of yellow, green, and pink. The effect was increased by different sorts of small fish gliding in and out amongst grotto-like growths. Here and there we noticed immense mushroom coral; the pedestal—comparatively small—being firmly attached to the bottom. The tops of these strange formations are perfectly level, not unlike an irregular loo table, providing a

secure standing-place for the angler. Large savage *murænæ* in the coral sometimes raise themselves out of the water and attack fishermen. The pearl oyster is found in small quantities in this lagoon.

The two boats reached the beach about the same time. A friendly greeting from old and young welcomed us ashore, as they led the way to the principal hut. Fowls and pigs were wandering about where Cook found only small brown rats. Rusty anchors, chains, and other ship-gear were scattered about. The dwellings were thatched with pandanus leaf; but all else was rudely built out of the remains of several vessels unhappily lost here of late years. Holes in the planking served instead of windows. Inside, the whole stock of European furniture consisted of two chairs, which were kindly given to the visitors. I almost imagined myself in the haunts of the old buccaneers in the West Indies. The natives grouped themselves all round the room on the floor, whilst I held a service in the Rarotongan language. A very pleasant thing it was to me to speak to these poor creatures of the Redeemer's love to sinful men, to reason with them 'of righteousness, temperance, and judgment to come.' Afterwards Bibles, hymn-books, and various other publications in the native language were distributed amongst all who could read. *Sunday Magazines*, *Sunday at Homes*, and *Good Words*[1] were given to M——, and most acceptable they were.

In a private conference I had a good deal of talk with M——, which I hope may bear fruit. He listened attentively to what I said, and engaged to give sufficient wood for the erection of a little church.

[1] A friend put a great number on board for distribution.

Palmerston's must at one time have been at least temporarily inhabited by a Polynesian race, numbers of stone adzes having been picked up on the islet. From thirty to forty have been found in the central part of the islet on which the tiny village stands. They were of different sorts and sizes; imbedded in the roots of cocoa-nut palms. On account of the absence of hard stones, these valuable axes were sacrilegiously used up in heating native ovens. A few, however, have been preserved; one of them is now lying before me, in all respects like the axes formerly used by the Hervey Islanders.

As of course no basalt is found on *atolls*, it is evident that all these ancient adzes were brought from volcanic islands. Drift canoes from Aitutaki and Atiu would fetch up at Palmerston's with the prevailing S.E. trade-wind. On the return of the N.W. winds in January and February, they could easily return to their original homes, as was actually done a few years ago.

Twelve ancient graves have been discovered on Palmerston's. Inside a hollow *buka* tree was found the thigh bone, &c., of a man.

On some of the islets sea-birds incubate in great numbers—curlews, noddies, boobies, frigate-birds, and tropic-birds, besides two sorts of land birds—plovers and a kind of paroquet. The tropic-bird of the Pacific (*Phaëton æthereus*) is a beautiful creature, with a plumage of a creamy white, and two long tail feathers of a blood colour. These tail feathers were greatly prized for head-dresses in the olden times. The tropic-bird incubates at the beginning of July. At the end of September, when their young are strong, they return to the ocean. The arrival of the tropic-bird intimates

the approach of the dry season, or winter—if winter there can be without snow, frost, hail, or sleet. The native proverb runs, 'The tropic-bird is heard; winter has come!'[1] The literal translation would be, 'The tropic-bird is heard; old cocoa-nuts must be our food,' as they usually subsisted on nuts during the winter months.

Even this dreamy, lotus-eating, Mohammedan Paradise has its serious drawbacks. M—— always carries with him a loaded revolver. A few years ago a plot was laid to kill M—— whilst asleep, and to drown his children in the lagoon. The women were engaged in the plot. This was no imaginary danger, for about that time three white men were murdered at Suwarrow's by their native companions. This may account for the presence of two large fierce dogs. M——'s word is law, and must be implicitly obeyed. In fact, he is, like Alexander Selkirk,

> 'Monarch of all he surveys,
> His right there is none to dispute.'

I hope a better day is dawning upon Palmerston's and its lord. I could not help recalling, by way of contrast, the inspired words: 'And the work of righteousness shall be peace; and the effect of righteousness quietness and assurance for ever' (Isaiah xxxii. 17).

After partaking of a refreshing cup of coffee, and tasting the excellent fish spread for us, we bade farewell, and were soon on board sailing for Rarotonga.

[1] Kua tangi te tevaki; kua kona te akari maro.

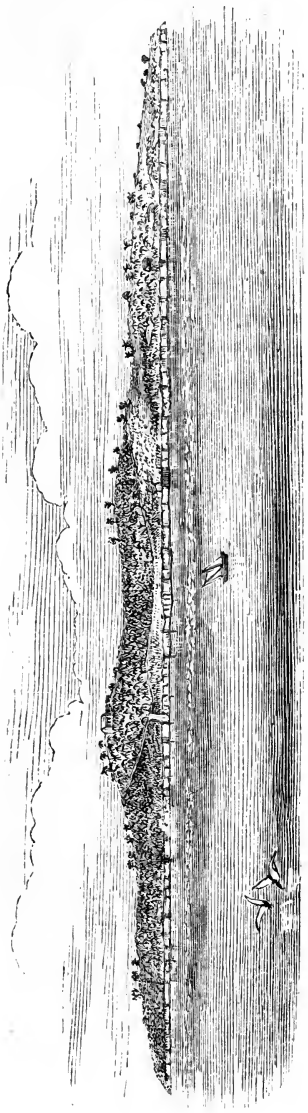
CHAPTER V.

A SUNDAY AT ATIU.

An irregular mass of uplifted coral appeared above the Pacific as we sailed in the John Williams from Mitiaro on Saturday, September 13th, 1879. The land rose higher and higher as we approached it, until it was 400 feet above the level of the sea. A long line of snowy breakers now came in sight. Towards the south the billows were dashing with awful fury upon the natural breakwater of coral. On the farther side of the narrow fringing reef the dead coral was everywhere worn into long gullies and weird caverns. In the distance clay hills were sparsely dotted with cocoanut palms. The most conspicuous object on the central hill is the church, which can be distinctly seen many miles out at sea.

The island of Atiu is a geological counterpart of Mangaia, from which it is distant 120 miles. Atiu is fifteen miles in circumference. It was discovered in 1777 by Captain Cook during his third voyage, and entered by him on the charts as 'Wateoo.'

We sailed nearly round the island to the landing-place. Everywhere near the sea grew the tall, graceful *Casuarina equisetifolia*, closely allied to the she-bak of



THE ISLAND OF ATIU.

Australia, and which alone furnished the weapons of war in the olden time.

A boat was soon lowered and our party landed on the rugged reef, numerous natives gladly helping to carry the various packages beyond the reach of the tide. As soon as we stood on the narrow sandy beach, a crowd of pleasant brown faces came to greet us and to escort us inland. I was offered a horse—there were eleven of them—but much preferred to walk. One of the first to shake hands with us was Ru, the native minister, about to retire from active service. My special object in visiting Atiu was to instal his successor, who is a native of the island.

The population of Atiu is 960, subject to three chiefs of equal authority, and living in a village built on the high table-

land in the centre of the island. The road to the village is an almost continuous ascent of two miles. At first it was very rugged, running over limestone rocks. Wherever there was a little soil, tropical forest trees of many kinds reared their lofty heads. The rocks which here and there cropped up to a considerable height were gracefully draped with wild vines, convolvulus, or *Abrus precatorius*. The stately *Hernandia peltata*—a species of laurel, with its dark glossy leaves and bell-like flowers, finely contrasted with the white-leaved candle-nut tree. Here and there the magnificent *Barringtonia speciosa* extended its gigantic arms in all directions. As tall as any of them stood the coral-tree, covered with scarlet flowers. The gaudy blossoms of the lemon hibiscus diversified the scene. Nor were the cries and songs of birds wanting. The bright-plumaged wood-pecker was hopping from branch to branch. Two species of pigeon, a sort of linnet, snipe, with some sea-birds were occasionally seen and heard. After strolling about a mile in this pleasant fashion, we emerged upon the open country, and saw the taro and other plantations of the natives. This part of the island is significantly called 'the land.' But everything here had a dried-up appearance, no rain having fallen for months.

Our road now lay over hills of red clay, scantily covered with fern and guava bush, introduced for the sake of its fruit. As we neared the village a view of exceeding beauty burst upon us; the ocean, a dense forest, a lake, numerous valleys with little hollows well planted with bread-fruit and chestnut trees, plantains, bananas, sweet potatoes, and pine-apples.

The village itself is irregular and dirty. The homes

of the common people are mere hovels. Amid all this stood out their well-built stone church (120 feet by 50), and the houses of two of the chiefs, who, with Makea of Rarotonga, came outside the village kindly to welcome us. It is not very often that the wife and child of the missionary accompany him on the annual visit of inspection. We went first to the native pastor's dwelling, which is built at the head of a valley. As, however, Ru was on the wing, we accepted the hospitality of Rongotini, and were the first to sleep in his grand new house, which cost £600, besides labour and food for the workmen. The house is two-storied, substantially built of wood, with a verandah and a balcony running all round, and a well-shingled roof. It is nicely finished off with doors and glass windows, and is furnished throughout in European fashion. The premises—some two acres in extent—are enclosed with a stone wall. The chief is his own architect. A European might possibly finish off the ornamental parts in better style, because possessed of better tools; still, I think the general plan and execution could not be improved. The house was three years in building. Roma-Tane's house is a copy of this, and is proving equally expensive.

A substantial tea was laid out for us; Rongotini and his wife (who is, in her own right, sovereign of the northern part of Rarotonga) chatting pleasantly with us. Yet, native-like, they refused to eat with us. In fact, they prefer to live in a spacious native hut just by, squatting down on fine mats spread over dried fragrant grass.

Rongotini is a fine portly fellow of about fifty. He is every inch a chief. When he speaks, it is with great

decision and authority. His father, like all the Atiuan warriors of that day, was a cannibal, the subject islands Mitiaro and Mauke furnishing sport and victims in abundance. Captain Cook certainly thought well of these islanders; to his interpreter Maî (the 'Omai' of the *Voyages*) they denied that they ever ate human flesh. This craftiness of disposition is well expressed in their own satirical designation, *meek-faced Atiuans*, or literally, *woman-faced Atiuans*.

A word about these subject islands. Twenty-seven miles E. by N. of Atiu lies the barren *atoll* of Mitiaro; fifty-five miles E. by S. lies the fertile little island of Mauke, only forty feet above the level of the sea. The tripartite division of lands and chieftainship obtains throughout all three islands. Large double canoes are continually going to these outlying islands and back. As an instance of the long sight of these islanders, I may mention what greatly surprised us, viz., the John Williams, a barque of only 200 tons, was sighted from the village at Atiu when we were lying off Mitiaro, a distance of twenty-seven miles. To them this did not seem extraordinary at all.

About 400 visitors were on Atiu at the time of our visit, on account of a feast given by Rongotini at the completion of his new house. Despite the scarcity of food, the feast came off the day previous to our arrival. Seventy large hogs were killed, besides great quantities of biscuits and bread baked for the occasion by a Chinaman. A vessel had been chartered to bring visitors from Rarotonga, Mauke, and Mitiaro.

The whole of Saturday evening was occupied in a meeting of the deacons of the Church, with reference to the removal of their old pastor and their acceptance

of his successor, who had just completed his term of study at the Institution at Rarotonga.

Long before daylight of Sabbath morning the wooden gong roused up everybody from sleep. At dawn I attended a prayer meeting in the great church. About five hundred were present. Itio, who has laboured in this group without a stain for thirty-four years, conducted the service. It lasted about an hour.

The full morning service fell to me. The long building was densely crowded (it has no gallery) from end to end. About 1,200 must have been present. The greatest decorum was observed; and close attention was given to all that was said. The congregation was neatly dressed in Manchester goods. The women always wear loose flowing dresses. It required, however, a considerable effort to make oneself heard distinctly. The roof had lately been shingled at a cost of £160, all defrayed by themselves. The church is nicely pewed throughout. In that morning's congregation were ten chiefs. It was an excellent opportunity to impress upon chiefs and commoners the requirements of the Gospel upon the hearts and lives of all who name the name of Christ.

On getting out of the pulpit I was erroneously informed that the barque was waiting for us at the edge of the reef. So off we hurried to the beach, but no John Williams was in sight. There was, however, a schooner, which doubtless originated the mistake. A tremendous rain-storm now set in, so that we were glad to take shelter in a deserted hut just by, and remained there some hours hoping for a change in the weather. We held a service meanwhile. At last we made our way back to the village drenched to the skin.

We were in a sorry plight, being bespattered all over with red clay. The natives playfully said that we had met with our deserts for having left their afternoon service, which it was understood that I should conduct. We were glad that night to retire early to rest. Next day proving fine, despite a rough sea, we got off safely, and sailed for Rarotonga.

The population of Atiu, Mauke, and Mitiaro, is 1610. Three native pastors care for the spiritual interests of the people, preaching on Sundays and officiating as schoolmasters on week days. Each Church supports its own pastor, besides making a small annual subscription to the London Missionary Society. The main work of the white missionary is to educate, induct, or remove, if any sufficient cause should arise; in a word, he is their spiritual adviser and superintendent. Christianity was introduced to these islands in 1823.[1] But it must not be imagined that

[1] By the Rev. J. Williams, who was afterwards slain and eaten on Erromanga. The people of Atiu resolved to attack and take the little mission vessel. But Roma-Tane, the leading chief of that day, was so astonished at the big 'canoe' without outrigger or paddles moving at its will over the ocean, that he prevented the execution of the plan by uttering the following poetical words, now become proverbial:—

Naai mai i karanga	By whose command shall an attack be made
E taparai i te enua atua i raro?	On a race of gods from nether-world?
E tungata te enua ngoru	Shall a race of weaklings
Ki te enua pakari te rave?	Dare to molest so wise a people?
Titiro ki te pai;	Look at yon vessel;
E karo ki te tira;	Gaze at its masts;
E tini, e tini, makorekare te taura.	At its multitudinous, innumerable ropes.

Roma-Tane became the warm friend of Mr. Williams, and a Christian. He destroyed the idols of the three islands.

Atiu is an island of saints. Very far indeed from that. Native pastors are altogether too lax in their ideas of Church government; and the chiefs are very despotic, continually trying to interfere in Church matters.

Atiu, like Mangaia, is famous for its limestone caverns; the largest of which is called Anataketake. To enter it, it is necessary to descend about twenty feet, through a chasm in the rocks, at the bottom of which are several majestic openings. Innumerable small birds breed in this cave. With the aid of flambeaux, it is possible to travel a mile underground amid the interminable windings of this vast temple of Nature. Water continually drips from the arched roof, which is from ten to fifteen feet thick, and is supported by superb columns of stalactite. From the glittering floor, which presents a wavy appearance, rise less attractive stalagmites. The fretwork ceiling sparkling in the light of torches is a sight never to be forgotten. A lake abounding in eels and shrimps occupies the centre. Until lately the caverns of Atiu and Mangaia were despoiled of their finest stalactite columns, in order to adorn the premises of the chiefs by keeping the snow-white sea pebbles in their place, much as at home we use ornamental tiles for gravelled walks. Anciently the *maraes* of their gods were invariably thus adorned.

The story of the discovery of the cave Anataketake is very romantic. A woman named Inutoto, being cruelly beaten by her husband, wished effectually to hide herself away. In looking about for a place of concealment, she came upon this wonderful cavern, and lived there in utter solitude for many years. She found no difficulty in sustaining life. Her now re-

pentant husband sought for her in vain, and then mourned for her as dead. Eventually a man in chase of a bird—the woodpecker—discovered the cave and then the hermit, who was thus restored to her husband Paroro. Her song, composed in the cave, has been handed down by tradition, and is now lying before me.

CHAPTER VI.

MAUKE; OR, A REMNANT SAVED.

A FAT chief of Atiu, named Akaina, paid a visit to the island of Mauke—a distance of fifty-five miles. Canoes from Atiu first make Mitiaro, and after resting there awhile, start again for Mauke. For such voyages, instead of a single canoe steadied by an outrigger, it is customary to fasten together two canoes and lay a deck across them. A mast is then set up; and with the aid of a large mat sail, plaited from the leaves of the pandanus, they rapidly skim the surface of the ocean. Guided by the stars only, these islanders have in this manner found their way from island to island from time immemorial. Occasionally, however, they are driven out of their course, and are either lost at sea or fetched up on some distant isle. It is in this way that the multitudinous islands of the Pacific have become populated.

On reaching the pretty island of Mauke, Akaina sent back his crew, himself remaining behind. The motive was a secret resolve to get possession of the wife of one of the chiefs. He succeeded in inducing the foolish woman to abandon her husband. The chagrined partner naturally resolved to be revenged.

SOUTH SEA ISLAND SCENERY (OPOA, RAIATIA).

He collected his friends one dark night, surrounded the dwelling of the renowned Atiuan warrior-chief, and killed him. That same night his body was cooked and eaten in revenge.

Quite a number of Akaina's countrymen happened to be living peacefully on Mauke under the protection of a chief named Tararo. None of these visitors were molested; but not long afterwards some of them found a pretext for sailing back to Atiu to tell the news of Akaina's fate. The 'meek-faced' Atiuans instantly resolved on vengeance. They had but recently returned from the extermination of the natives of Mitiaro. Eighty double-canoes were speedily equipped and sent to sea with all the warriors that the island could furnish. The designation of this second expedition was *ei tiki inu*, i.e., to be avenged on the Mauke people 'for eating Akaina's fat.'

The little fleet touched at Mitiaro for refreshment and to pick up Nukuhiva, who willingly accompanied them. As soon as the invading fleet hove in sight, the inhabitants of Mauke knew (having heard of what had occurred on the sister island) that their fate was sealed. Although more than double the number of the exterminated Mitiaro people, they had not the courage to strike a blow at the invaders.[1] They at once abandoned their homes and run off in all directions, to hide themselves by twos and threes in caves and dense thickets. The first care of the invaders was to haul up their great double canoes out of the reach of the surf; the entire body of warriors then marched up into the interior and took possession of the forsaken dwellings and plantations of the doomed islanders.

[1] For which the Atiuans twit their descendants to this day.

Disappointed of a fight, it was arranged that a great man-hunt should come off on the following day. Accordingly at the appointed time, the invaders scattered themselves all over the island, peering into almost every crevice, and dashing into the densest thickets and dragging thence their trembling victims. These poor creatures were marched to the encampment and counted. They were then compelled to collect firewood and banana leaves, each party of two or three having to heat a separate oven, the conquerors meantime encircling them to prevent the possibility of escape. Bitter jibes and sarcasms were all the while lavished on their victims. When the stoves were red-hot, and the embers removed with many tears, the wretched captives were clubbed and cooked in those very ovens. A diabolical feast followed. Next day another hunt was made, and numerous new victims secured. All these, without distinction of age or sex, were treated in the same barbarous way as the first. Infants were snatched from their mothers' arms and brained, and then cooked with their parents! The spot where these atrocities were committed was pointed out to the writer. A huge block of *tamanu* (*Calophyllum inophyllum*), or native mahogany, covered with deep indentations—on which the heads of many were chopped off—was shown as a proof of the hard service which the Evil One exacts from his subjects. In this way in the course of a few days the invaders nearly exterminated the original inhabitants of Mauke—a race confessedly sprung from themselves. After devouring all they could, a large quantity of this disgusting food remained. This was re-baked from time to time, and packed in baskets for their wives and children at Atiu.

When the surviving starvelings were assured that the invaders were gone, they emerged out of the most inaccessible caves into the light of day. Their first care was to bury the ghastly relics of their relatives, and then slowly rebuild the huts burnt down the day the invaders left.

But new troubles were preparing. Maiti, the leading man amongst the survivors, was exceedingly disgusted to find that Tararo had been appointed by the Atiuans sole ruler of Mauke, in place of the former chief; but, of course, subject to Roma-Tane. When the fugitives had in a great degree recovered their former physical strength, and completed their house-building, Maiti collected forty fighting men, and openly defied Tararo. In the ensuing fight Maiti lost his younger brother and ten of his men, but Tararo's party became utterly scattered. Tararo and his aged father fled to the principal *marae*—Tangiia-Nui, or Great Tangiia, in the vain hope of safety. Maiti and his surviving followers determined to desecrate the sacred grove by slaying the deputy-king of the Atiuans and his father. But Tararo, getting a glimpse of the advancing foe, nimbly climbed up one of the topmost branches of a magnificent chestnut, which is still pointed out. Like our own royal Charles, he was completely hidden from sight by the thick foliage. By this time the attacking party had encircled the house which Tararo had so recently left, but found only the father Tapokikiri sitting quietly at the doorway, under the shade of the sacred[1] *tamanu* trees, awaiting his fate, being too

[1] 'Sacred' as overshadowing the *marae* of Tangiia-Nui. All trees on a *marae* are sacred; the sanctity originating in the god worshipped.

much of a warrior to run to save his life. He at once fell under their blows. They looked everywhere for Tararo; but he could nowhere be found. Some of them even looked up at the very chestnut tree in which he was hidden, but perceived only gigantic limbs covered with moss and ferns and a wondrous wealth of foliage. After a long and fruitless search, they returned to the interior.

At dusk Tararo betook himself to the rocks, where he long remained, subsisting as best he could upon wild fruits. One day he chanced to fall in with his near relative Kairae.[1] They agreed to live together in a cave, very difficult of access, the entrance to which was pointed out to me. Maiti and his party scoured the island to discover their hiding-place. On one occasion they came to the very cave where the fugitives were hiding. A long spear was thrust in at hazard, and nearly pierced Tararo. The spear was withdrawn, and the foe thinking they were not there, passed on, thus enabling them to breathe freely again. But one hope remained: could Kairae get to Atiu to tell Roma-Tane of Tararo's miserable state? The brave Kairae resolved to attempt it. As the wind was then fair for the projected voyage, Kairae the same night made his way to the sea-side, where he took possession of a tiny canoe. Alone he dragged it across the reef, launched it on the ocean, and without food or water dared to cross over to Mitiaro, a distance of thirty miles! (Many years later a grandson of this same man repeated this marvellous feat, in consequence of a bitter family quarrel.) By daylight the

[1] Kairae's son, named Vairatai, was still living in 1882. My friend is one of the most influential men on Mauke.

canoe was out of sight, so that the flight of Kairae was unsuspected. The adventurous voyager reached Mitiaro much exhausted. After obtaining a little rest and food there, he started again for Atiu—still alone in that little canoe!

Kairae's arrival set Atiu in a blaze of excitement. Roma-Tane ordered his warriors at once to get ready their double-canoes for a fresh descent upon Mauke. As soon as the wind veered round to the north, the little fleet put to sea.

In expectation of the arrival of the Atiuan warriors, Tararo had taken up his abode at the sea-side, hiding amongst the iron-wood (*Casuarina equisetifolia*) trees that grow most luxuriantly there. Occasionally he even ventured to climb one of the loftiest of them, to get the first glimpse of coming assistance. At last it came, to the dismay of Maiti and his followers.

As on the former occasion, not the slightest resistance was made. The invaders took possession of the deserted dwellings of Maiti and his clan, Tararo openly joining them. The entire party of Maiti was taken alive, and were leisurely slain, cooked, and eaten. But on this occasion, happily, the women and young children were spared. A few of the younger women were taken to Atiu by the invaders as wives. An aged woman told me that she was one of those who were compelled to go—in a canoe laden with the flesh of her countrymen!

Numbers of the invaders ultimately settled down on the fertile little island of Mauke. The stay of Roma-Tane this time was short. Tararo was again appointed deputy-chief.

A third expedition was subsequently planned by

Roma-Tane to kill off the children of those formerly slaughtered. But God had thoughts of mercy towards the poor remnant. In 1823 the Rev. J. Williams touched at Atiu; *his first convert there was this fierce Roma-Tane!* The ruthless conqueror and cannibal threw the entire weight of his authority in favour of Christianity. And thus the remnant was saved; for Roma-Tane remained consistent to the period of his death.

A native of Atiu named Katuke—whose father took part in the atrocities above referred to—became pious in early life, and subsequently a student for the ministry, and ever since 1844 has been the respected pastor of the village church at Ivirua on Mangaia.

By way of contrast with the preceding, I subjoin a notice of the first of my many visits to this pretty little island, which has never had a resident white missionary.

On June 13th, 1865, we set sail for Mauke, and on Friday, 16th, land was sighted by my companion the chief (who had never before been out of sight of his own island) long before it was visible to the keenest European eye. As we neared the land we were much pleased with its pretty appearance, although the island is low. It is a perfect level, about forty feet above the surface of the ocean, and sixteen miles in circumference. It lies 100 miles due N. of Mangaia. But it was very sad to observe how the hurricane of February 3rd ult. had devastated the island.

Over night the people learnt that Gilirua was on board. At four o'clock A.M. of Saturday, the 17th, every man, woman and child turned out to weed the pathway from the beach to the village in the interior.

At eight o'clock we landed. The moment the boat touched the reef we were (four of us) hoisted up on to a rude sofa, secured by two long poles, each about thirty feet long. The fact was, all the able-bodied men on the island had resolved to give us a thorough welcome, and that we should *not* walk. At first I stoutly resisted; but finding this hopeless, I quietly submitted to be carried in state with my friends. But two serious obstacles interposed; two gigantic iron-wood trees lay across our path. A terrific cyclone uprooted them, and deposited them where they are likely to lie for many a year. In all directions the forest trees had been pulled up by the roots and hurled about in wild confusion. The sea must have risen thirty-six feet on that dreadful night. With a single exception, all their splendid canoes were swept away. Every building, including the church, the school-house, and the teacher's dwelling, was laid low. Food of every kind was destroyed. However, through Divine goodness, no life was lost on Mauke. Notwithstanding the damage sustained by the hurricane, the island is again verdant and beautiful. Food is, however, rather scarce at present, and it will be many years before the village will be as neat as it was formerly.

After a while we were safely deposited at the door of the teacher's house. The chiefs and deacons and Church-members now came to shake hands. Itio, the teacher, must have been pretty diligent, as he had rebuilt his own neat lath-and-plaster house (containing three large rooms) and the school-house, which serves as a temporary church. The church itself lies in ruins for the present; but even in desolation it is a wonderful piece of workmanship for natives possessed

of but few tools. The chiefs told me that, all being well, they hope to rebuild it next year. In the course of the day we were invited by one of the principal natives to go to his house and partake of a feast. We went, and found food enough for forty guests instead of four. On such occasions it is usual for the master of the house to appear in his *worst* clothes; after inviting you to be seated and to help yourself to the good things spread before you, he makes himself scarce. The women and servants, however, stay to fan the visitors. Meanwhile the people of Mauke were all crowding about, watching every movement of the strangers. A remark, a joke, is caught up, and repeated from mouth to mouth. Especially are they delighted to get a shake of the hand; they will go on shaking till the hand positively aches. At nightfall two large roast pigs were sent as a present to me. Not being competent to the task of devouring them, I gave one to the teacher, who has, I think, nine children, and the other I gave to the captain for his native crew.

After family worship I retired to bed, but not to sleep. The four-post bed was covered with neat mats. I drew my cloak over me, boots and all, but fleas and mosquitoes effectually banished sleep for a long while.

On the morning of the Sabbath a prayer-meeting was held. The chief who accompanied me conducted it with great propriety. I preached in the morning and afternoon. I fear that my addresses were rather long, but there were many things I wanted to say to them. It was a first meeting with these interesting islanders. The building was crowded. Every man, woman and child (in health) on the island was present,

as I suppose. The population of Mauke is 450 souls; of this number 201 are Church members. All profess Christianity and are under Christian instruction. Twenty-eight dollars were contributed to our Society by these people last May.

Considerable differences obtain between the dialects spoken in the various islands of this small group. At first I feared that they would not understand me, but in this I was agreeably mistaken; for when Itio detained the people at the conclusion of the morning service, and asked them what they knew of the discourse, they went through its principal points with great correctness, and even added some suitable Scripture illustrations of their own.

At the close of the services an aged Church-member introduced himself to me. He said that he well recollected their terrible wars in the days of heathenism, and had often partaken of *human flesh*. 'But,' added he, with tears streaming down his cheeks, 'the Gospel has brought to us peace and good-will and eternal life.'

On Monday morning they insisted on presenting us with a heap of cocoa-nuts and four small pigs, as a proof of their good-will and their joy at seeing the face of a white missionary. It grieved me to accept it, as I well knew to refuse their present on any pretext whatever would be counted a deliberate insult.

One pleasing custom I must mention. Another way of showing respect to guests is to crown them with chaplets of flowers. Each individual, on depositing his single cocoa-nut or bit of sugar-cane, put a wreath of flowers on the head of each visitor; so that at last we were nearly lost in the garlands that enveloped us.

We were much pleased with their schools. I exercised both girls and boys in arithmetic, and was delighted with their prompt and correct answers. These young people meet for an hour's teaching before going to work. Some are as young as three years, others are about twenty, each class being under the care of an intelligent teacher. I shall never forget the three pleasant days spent at this interesting island.

CHAPTER VII.

A HOLIDAY EXCURSION.

One lovely morning at sunrise I rode with our two elder boys to Ivirua, to show them the last resting-place of their kind nurse. It transpired that, unknown to us, she had carefully collected the hair of the little ones whenever cut, wrapping up each child's locks in a separate piece of paper. The day she died she requested one of her friends to take out of her box these little parcels and tie them about her head, in order that they might be buried with her. The hair of two dear boys in heaven was, by her directions, placed in her ears. The fair curly locks of the next three were secured to the top of her head, whilst those of the two younger were placed on her forehead, in token of her special fondness for them.

Katuke, the native pastor, gave us a hearty welcome, spreading for us a rough Polynesian breakfast. We then visited the grave of our faithful Deborah, and went sight-seeing under the guidance of a worthy deacon.

Our path led through the bush. A noble banyan-tree (*aoa*) growing amongst the rocks shaded us from the sun. On every side its drooping limbs had touched

the earth, and, taking root, became in their turn supports to the parent tree. It was anciently believed that the banyan-tree first grew in the moon, supplying the fair goddess Ina with fire; but from seeds dropped by a pigeon sacred to the god Tané it has become naturalised on earth.

The gorge through which we passed became narrower and deeper as we advanced, and the vegetation rank. Huge stones covered with moss and tall fern lay about in all directions. We came suddenly upon a deep chasm, the farther extremity of which was lost in obscurity. Eels abound in its forbidding waters, which we tasted. The entrance is narrow but lofty. Far above were trees of various kinds growing out of the natural stone roofing, whilst we, like mere pigmies, were vainly peering through the gloomy opening. But this was far inferior in grandeur to a second chasm or natural well, a few hundred yards beyond, called Vai-tiria. Cautiously approaching the edge of the precipice, we threw down large stones into the dark stream beneath. The solid stone roof is perfectly flat, with numerous cracks, through which the moisture from above percolates. Stalactites of inferior quality relieve the savage monotony of the scene. A narrow pathway led to a higher and more dangerous opening, down which a single glance sufficed to make one giddy. Every crag and stone is covered with soft moss and festooned with vines. The two chasms are connected with each other. In the rainy season the waters become exceedingly deep. The meeting of the boiling surf of the ocean with the accumulated waters from under these caves in the wet season naturally occasions a whirlpool, which sometimes carries away careless

fishermen. Of course it was once believed that a malicious divinity lived at the bottom, ever watching for obnoxious mortals.

A curious story is connected with Vai-tiria. Some dozen years previous to the introduction of the Gospel to this island there was a great scarcity of food. A man named Eke, father of our old nurse, at that period lived about a mile from this spot. One day he caught two men stealing some of his food. With the assistance of a friend he bound them hand and foot, and threw them down alive into this dismal hole. Upon hearing the repeated heavy splash, Eke and his companion went home, assured that the thieves were drowned. But upon reaching the bottom the cold water somewhat loosened the green thongs with which the poor fellows were bound. Hope revived. By dint of desperate efforts they got their hands free, and of course their feet were speedily released. Swimming about in the water, they discovered that whilst the side on which they had been thrown was perfectly inaccessible, yet on the opposite side of the chasm, hidden by a point of rock, is a small ledge forming a natural pathway conducting to an aperture through which they might get out. In this way these two poor fellows escaped the doom intended for them by Eke.

In order to get to the interior, it was needful partially to retrace our steps and pass through a remarkable grotto called 'the hole' (*te puta*). The entrance was not unlike the doorway to an ancient Gothic pile, black with age and hastening to decay. At first we got several thumps on the head from some of the innumerable dead stalactites hanging from the roof; but as we proceeded, the ceiling grew higher, and

light streamed in from the farther end, where a semi-circular opening revealed the lovely valley beyond, laid out in well-cultivated taro patches. Our little boys were delighted with the 'musical stones,' *i.e.*, large stalactites in bell-like hollows, which give forth when struck a pleasing though somewhat monotonous sound. We all united in singing a hymn in the native language, standing on the perfectly level floor of this natural temple. The children were intrusted successively to the care of our guide, who kindly conveyed them in safety to the bottom by a sort of trap-door (Nature's own) in the middle of the grotto.

Emerging into the open valley, we rested awhile on what had been in the memory of many now living a battle-field. The battle of Teatuapai was the breaking up of the Mautara tribe, which for more than a century had swayed the destinies of the island. Close by was the ancient *marae* of Maputu, built of huge stones, and infamous for its bloody consecration. It is now well planted with the paper-mulberry-tree.

In the middle of the vast pile of rocks which overshadows the valley is the 'Cave of the Tern,' once a famous stronghold, now the haunt of bats and birds. It was believed that this stronghold had two special guardian spirits which had *maraes* on the very edge of the rock above. Although they had no idol-forms, they were said to be very vicious. When engaged in fighting men or demons, the falling of a sere *ti* leaf without a breath of wind was a sure sign of their presence. On our right was the *marae* of Timapere, or 'The-whisker-away,' who loved to steal away men, women, and children from any part of the island—a most convenient way of accounting for the sudden

disappearance of an enemy. On our left was the grove of Teu, *i.e.*, 'The-author-of-unlucky-hits,' a mischievous sprite, who prompted individuals to give a fatal blow in the midst of a crowd in such a way that the murderer should remain unknown. Whilst we were gazing from our quiet resting-place at the romantic scenery, we heard the ringing of axes on the summit of the rocks. A number of Iviruans were felling timber at Teu's *marae* for the repairs of their church. We soon afterwards met them carrying it away. In heathenism no penalty would have been considered too severe for the crime of felling a tree growing on a *marae*.

It was now midday. After getting a refreshing draught of cocoa-nut water we returned to the village. On our way we passed the scene of one of Eke's exploits. One day his friend Mauri missed a bunch of bananas. It had been stolen by some starving men hiding in the rocks, fugitives from the battle of Teatuapai. Eke and Mauri started off with their spears in search of the thieves, each taking a different route. In a short time Eke came upon a powerful man with the stolen bunch of bananas at his side. He was kindling fire by means of two dry sticks. Seeing Eke approaching, he inquired, 'Are you alone?' The mendacious 'Yes' of the man-hunter made the thief easier in his mind. 'Come, hold one of my fire-sticks,' said he, 'whilst I rub this one on it.' Eke did so; and the thief worked hard to kindle fire. All this time each was meditating how to compass the death of the other. Fire was at last obtained, but the thief had the ill-luck slightly to burn the foot of Eke, who by a sudden movement grasped with both hands the long hair of his victim. Both were strong men, but Eke

was the smaller of the two. Over and over they rolled on the ground without Eke being able to break the neck of his foeman. Getting exhausted, he shouted lustily to his companion Mauri, who hastened to the rescue. The strife was ended by Mauri's driving his long spear through the body of the thief, who on closer inspection proved to be his own uncle. The hungry man had an accomplice, who watched from a neighbouring crag the death-struggle. As soon as Mauri appeared, the coward took to his heels, but eventually perished of hunger.

In the centre of the village of Ivirua, close to the public road, is a narrow chasm called the 'Ghost cave' (*rua o mauri*), so overgrown with bushes that one might pass close to it without suspecting its existence. It is thirty-six feet in depth. Here we had another reminiscence of Eke. A great amusement of his was to search out and take away the food of starving fugitives, although not at all regarded as private property—rats, crabs, bats, candle-nuts, and pandanus drupes. On one occasion he came upon seven men, mere skeletons, huddled together in a cavern. The unpitying and well-armed Eke drove this famished band out of their hiding-place to the 'Ghost cave.' It is said that they approached the fatal pit with tottering steps, not having strength to run away. All seven were thrown down the 'Ghost cave.' This crime was committed for the mere pleasure of getting rid of the conquered.

At the very end of the village is 'The moss-grown cave' (*ana-rimua*), which is sixty-six feet deep. I had expected to see something imposing; but when our guide stopped, and with his stick vigorously beat down

the tall ipecacuanha weeds, we saw a small black hole close to our feet. 'Here,' said Pae, 'our fathers were accustomed to throw down their dead, and not unfrequently the living too!' Although the hot sun was vertical, it was several seconds ere we could see anything. Underneath it opens up into a spacious cavern. At about a third of the depth is a large rock, on which the natives of that part of the island were formerly accustomed to rest a ladder when burying their dead.

A good old man once related to me the following anecdote of Eke. 'One day,' said Katia, 'a number of us went fishing at Ivirua; we were very successful, and at midday made our way back to the interior. The seniors of our party had gone on in front, and were hidden by a turn in the road, whilst I and some others slowly carried heavy baskets of fish. Upon arriving at the place of feasting, it was noticed that Kapua, uncle to myself and Eke, was missing. Nobody could account for his disappearance. Eke was silent. Late in the afternoon, when we were all about to depart, Kapua made his appearance considerably bruised. A dozen voices shouted, "What have you been doing with yourself, Kapua?" Said Kapua, "I and my nephew yonder" (pointing to Eke) "were walking home together —he was a little behind me—when, passing 'The moss-grown cave,' I was suddenly thrust down the hole. Luckily for me, I fell on the stone where the ladder is sometimes placed, and after hiding some time I contrived to get out again." Eke was for once greatly abashed. Though near relatives, they had taken different sides in battle, and Kapua happened to belong to the beaten party. This atrocious act was done to

please a friend, who had long cherished a deadly hate against Kapua.'

At length we made our way home, thinking we had seen and heard enough to make one thankful for the Gospel which proclaims 'peace on earth, and good-will toward men.'

Eke was in the habit of carrying about with him a piece of sharp flint for the purpose of hamstringing thieves. A son of Eke, now living, told me that upwards of ten are known to have been thus put to a lingering death by his father. One dark night he clubbed to death a hungry man who was helping himself to some of the abundance of Eke. The corpse was at once buried in the bank of the taro patch. In Christian times the crime was confessed by this cruel man.

I think the murder which rested most heavily upon his conscience was that of a young and unoffending girl, named Kirivari (The soft-skinned), a fugitive from a later battle-field. Months had elapsed since the fight, still Eke and a number of others delighted to scour the rocks and forests in search of fugitives. Returning from a bootless hunt along the margin of the sea, they came upon this young woman searching for land-crabs among the stones, and literally pelted her to death. The sister of the murdered girl came with her husband to bury the dead. The lament of Ati for her sister is still remembered in the family.

Tangi rai, e Ati, te takanga! Kua vare atu koe.	Weep, Ati, for the innocent wanderer. Thou art gone for ever!
* * *	* * *
Ei runga ta vero. E pou enua Avaiki aore e taea!	Thou victim of hunger, Gone to spirit-world—a land whence none return!

Aore e taea ra, e Ua.
Anga atu te aro i te opunga.
Kua vare te ao ra.

* * *

Ka aere te tanu aitu.
Teiia te rua i vaitata, e vaka?
E apai i te ngau roa.

Kake akera, e Kiri, i Onepoto,
Kua kitea te maora maunga i uta.

Ketu atu, e vaka; aore i te papa.
Te raro atu—te raro atu!
Kua mate i te ta, e te tangata ta!

Alas, my Ua, none return!
Thou hast followed the track of the sun,
Ne'er more to gaze on this world.

* * *

Let us go and bury the poor body.
Shall we bear it, husband, to a cave?
Or carry it to the hill-top?

We will leave the short sandy beach,
And climb where the mountains are seen.

We have searched in vain near the sea.
Farther on and farther yet (is the spot)
Where our sister met her cruel fate.

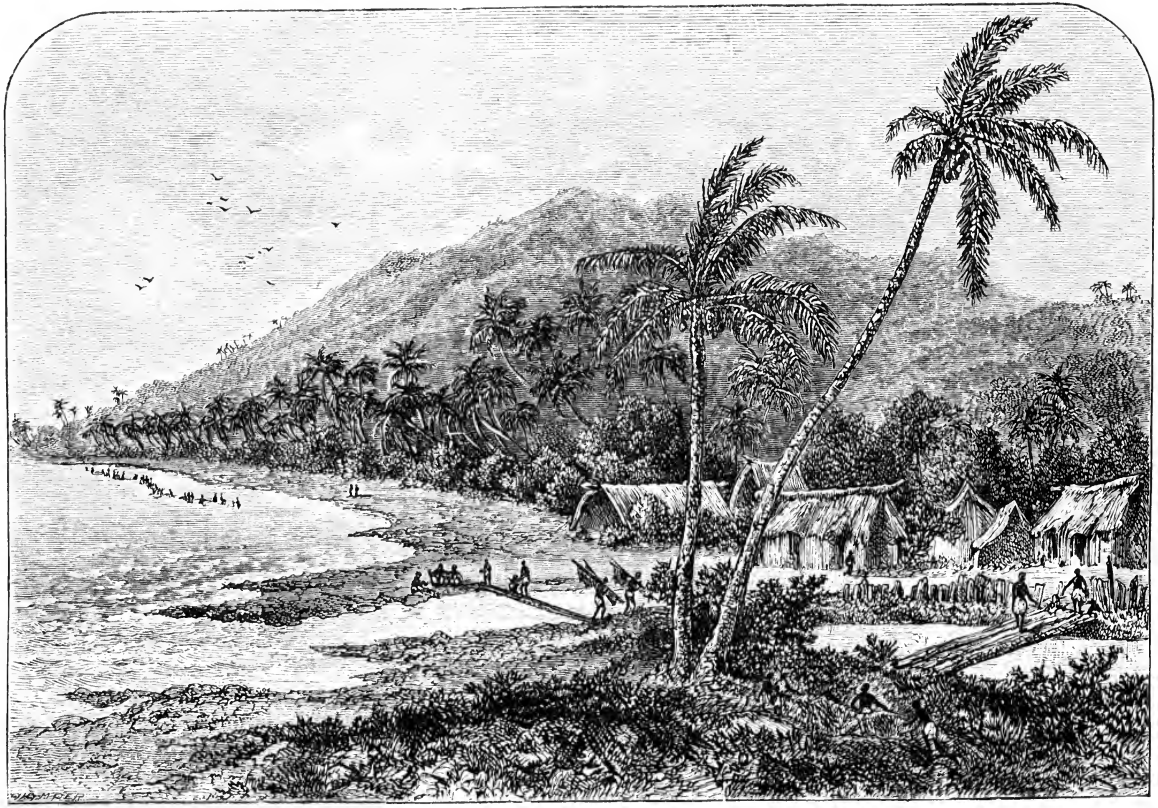
Eke provoked the battle of Araeva by a defiant war-dance on a hill opposite to the camp of those who won the day. He felt sure of victory, as he belonged to the larger body; but through his stupidity the fortune of the day was decided ere the best warriors on his side had time to get up to the unexpected battle-field. The result was a complete rout. A foe followed hard after Eke; a great stone axe was uplifted to revenge his numerous misdeeds, when a sister of the enraged warrior threw herself on Eke to avert the stroke. It was felt to be excessively humiliating that this once noted man should eventually owe his life to the pity of a woman. Eke lost all his lands, and consequently all his wives save one. Having nothing to eat, they sought shelter and food for themselves and their children from their relatives.

Eke was baptised by Davida. In his old age he even learnt to read of Him who beareth away the sins of the world. Eventually he became a Church member,

and was appointed by the chiefs a police superintendent. Being now a wiser as well as an older man, he conversed freely about his own cruelties 'during the reign of the devil.' It is said that he was quite exemplary and consistent in his conduct. He died in the year 1848, leaving his eldest son a good preacher and an active deacon of the Church.

PART II.

BIBLE TRUTHS ILLUSTRATED BY NATIVE PREACHERS.



A RAROTONGAN VILLAGE.

Bible Truths Illustrated by Native Preachers.

CHAPTER I.

NATIVE PREACHING.

A NATIVE orator cannot open his lips save in parable, song, or proverb. These embody well-known facts in natural history, or narrate incidents in their clan histories, bristling all over with the terse sayings of the sages of past ages. Their songs commemorate the deeds of the illustrious dead, the wanderings of disembodied spirits, and the faith of former days. A person well-versed in the vernacular may be utterly at a loss as to the meaning of a long speech, which to the initiated shall be full of sense and point. I have heard an impassioned native orator mix up humorous allusions, historical narrative, and laments for the dead in seeming confusion, but with a well-defined purpose and thrilling effect.

A gifted native preacher avails himself of all these sources. An ordinary English address, translated into the native languages, would fall flat upon the hearers. The Polynesian preacher expounds the text to the best of his ability, and seeks to bring its lessons home to

the minds and hearts of his audience. But in so doing he wisely adapts himself to their modes of thought, and avails himself of the stores of illustration that lie around him. Scripture history is an inexhaustible and ever-interesting mine of pulpit illustration; very pleasant to me is the memory of hours spent in listening to graphic descriptions of Scripture scenes and characters from the lips of native preachers.

A native minister invariably divides his sermon after the fashion introduced by the original missionaries, and which is after all the best adapted for household catechizing after service. He first announces 'the body of the word,' *i.e.*, the text. Then follows 'the foundation,' or introduction; succeeded by 'the first trunk,' or general division. Two or three 'branches' out of the 'trunk' naturally follow. In general there is a 'second trunk,' with 'branches' springing out of it. When all these have been explained and illustrated, 'the corking,' or application, winds up the discourse. The allusion is to a native bottle[1] of scented oil, which must be carefully corked. If that be omitted, the precious contents will be spilt. So too in a sermon; everything depends on the application. I subjoin a translation of an outline of a missionary sermon submitted to me by a worthy native preacher. It is entirely his own, and is somewhat ingenious.

Body of the Word: Matthew ii. 11.

The Foundation. The pitiable state of the heathen as I have seen it. Describe it.

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[1] The ancient bottle of these islanders was the perfectly round gourds called *ua rōrō*.

I. Trunk (of discourse). Let us imitate these Wise Men in bringing gifts to our new-found Saviour.
  1. Branch (out of that trunk). Our hearts.
  2. Branch (out of that trunk). Our bodies.
  3. „ „ Our property.

II. Trunk (of discourse). Why should we do so?
  1. Branch. In gratitude for light received.
  2. „ Because He is Lord of all.

III. Trunk (of discourse). Those who refuse to give to Him are —FOOLS!
  1. Branch. For in reality we *own* nothing at all.
  2. „ Those who freely give are themselves richly blessed of God.

The Corking: Nothing that we can bestow to help His cause can compare with His unspeakably precious gift to us of His Son.

CHAPTER II.

BIBLE TRUTHS ILLUSTRATED.

SEVERAL years ago the writer gave to the public [1] some illustrations of Scripture truth culled from native sermons and addresses, to which he had listened with delight when resident in Mangaia. After a long residence in Rarotonga—an island one hundred and ten miles distant from that on which he formerly laboured—it has occurred to him to present to the public some recent illustrations, so as to assist in forming a judgment as to the substantial unity of thought on Bible truths amongst native Christians of different islands in the South Pacific.

Prayer.—Maumautoa remarked in reference to James v. 16: 'It is now (January) the season of plenty. The trees are laden with bread-fruit, chestnuts, &c. But these fruit-bearing trees are lofty;[2] to get at these good things we must use the longest rods and bamboos with a hook adjusted at the end. So too in regard to spiritual blessings. Happily we live in a time of spiritual abundance. There is a plentiful harvest of good things for God's children; but how to

[1] See *Life in the Southern Isles*, p. 115.

[2] From twenty to twenty-five feet in height.

get at them? How, but by prayer? This is the hooked stick—so long that it will reach to the topmost branch of the tree of life that grows in the Paradise of God, to bring down its precious fruit whenever needed.'

Mature and immature Faith.—Young cocoa-nuts thrown down from the crown of the palm, crack, and the milk is sure to be spilt. Not so full-grown nuts, which invariably come to the ground unharmed. 'So,' said Ezekiela, 'it is with professors. Immature Christians are easily turned aside by temptations and persecutions; whereas mature faith remains steadfast under the severest trials.'

The Sanctifier.—A young native, just converted, remarked at a prayer-meeting: 'I want to tell you my little thought. It is this: we are just like forest trees felled for a new church, crooked, twisted, branching this way and that, with innumerable blemishes. It is of no use to try to make ourselves better, but let us at once drag our hearts, with all their faults and sins, to the feet of Jesus. He will by His Spirit so alter, trim, and change us, that eventually we shall be made pillars in the temple of God.'

The finally Impenitent.—If the flame goes out of ordinary firewood, the fire speedily expires. There is, however, this peculiarity about dry iron-wood (*casuarina*), once lighted the fire smoulders on and on until the log is utterly consumed. 'So,' said Lameka, 'does God's anger burn towards the obstinately impenitent. "They are a smoke in His nostrils, a fire that burneth all the day" (Isa. lxv. 5). That fire will burn on and on until the wicked are utterly consumed.'

Bird-snaring.—At a Friday meeting for exhorta-

tion, the chief justice Vakatini (about seventy-five years of age) spoke as follows: 'Let me remind the young of our ancient methods of catching birds before the introduction of fire-arms. Land-birds were then very plentiful. Bird-catching was the employment of grave men, as well as of giddy lads. I was very successful at this sport; for our party would catch as many as thirty or forty birds in a day. As soon as the coral tree (*Erythrina*) bursts into blossom, flocks of dark-plumaged *ioi* (a sort of pigeon, so called from its cry) would come to sip nectar from its scarlet flowers. Our plan was to put a number of running nooses of strong cocoa-nut fibre near the flowers. This was done at mid-day, when the birds were asleep in the forest. Towards evening, or at break of day, a flock of hungry *ioi* would come to feed. Some of them would certainly be caught by the feet; others, warned by the frantic fluttering of their companions, would fly away; occasionally a powerful bird would snap the string and escape. The banyan-tree, the *koka*, and the *karaka*, were the favourite resort of our largest native pigeon (*rupe*); the yellow berries of the former, the delicate flowers and seeds of the *koka*, and the light blue fleshy seeds of the *karaka* being their special delights. Our plan was to smear birdlime[1] all along the principal branches, so as to detain the feet of the birds incautiously resting awhile after a meal. When the fruit of these trees was exhausted, the birds, large and small, would congregate on the *neinei*, as

[1] Prepared from the gelatinous substance which exudes from the bark of the bread-fruit tree when bruised. On the second day it is mixed and pounded with baked candle-nuts. This was the universal birdlime of the South Sea Islanders.

that tree blossoms later on in the year, the attraction being the sweetness hidden in its large golden flowers. A favourite resort of ours was the mountain, Karouga (on the south-west of Rarotonga), which was formerly covered with these beautiful trees. So delighted would the pigeons be to sip the honey contained in these flowers, that great numbers would be caught with slip-nooses and light nets. All these birds were captured alive; the greater number for eating, some for the sake of their beautiful feathers. The latter were kept in cages, so that they might be plucked from time to time. The feathers thus obtained were used to adorn the gods we worshipped, and the wonderful head-dresses (often a fathom high) of our chiefs.

'This is just a picture of what Satan is doing in our land now. We are the foolish birds he seeks to ensnare. He employs numerous devices, suited to our various ages, temperaments, and circumstances. Yon merry birds, so soon to die or become captive, dream not of danger. Nor do you, young men, know the imminent peril many of you are in. The foe will not rest satisfied until he gets you into his clutches to devour, or at least until you become his slaves. If by the grace of God you have escaped, see to it that you do not go back to the old scenes of temptation and peril. Once, indeed, we were all in the power of the great enemy of souls. But, thanks be to God! the Gospel has come to our shores, and now "the snare is broken, and we are escaped" (Psalm cxxiv. 7).'

The Watchfire.—The following was the conclusion of a missionary address by Maretu, who was a beloved and venerable native pastor at Ngatangiia, and for

forty-six years a preacher of the Gospel: 'Finally, brethren, recollect that if the watchfires die out, the canoes will be lost. Many of our near relatives have ventured far out on the ocean to fish for the souls of the heathen. The night is dark; their work is perilous. Our share of the work is to keep awake, to pile up dry cocoa-nut fronds on the watchfires, and shout to the returning canoes, so that they may know where to land. Ah! if the watchfires of prayer and faith burn brightly, our brethren will ere long return heavily laden with spoil.'

Trials.—Tuārae, another preacher, remarked on fast-day: 'Fire tries all things. God tries us to show us what we really are. I take up a fine *taro* rootstock[1] for our evening meal. It looks faultless. I wash it in the stream and scrape it; still I believe it to be excellent. I now put it into the oven and cook it; but alas for our supper! one half of it is waxy and quite uneatable. The other half is good enough. When the hour of trial shall come upon this Church, let not half of us prove like the big *taro*—utterly worthless in the estimation of our Lord.'

Prayer.—The same Tuārae went on to say: 'I often gaze with admiration upon the white man's canoe (= ship). Our frail barks would be swallowed up in a storm with their living freight, whilst the ship of the white man is perfectly safe. Look at the white man's ship in a cyclone; every sail but one furled, and nothing visible but tall slender masts, which ought to snap off like dry reeds. What is the secret of their strength? Is it not the many ropes—fore and aft, starboard and larboard—by which the whole is bound

[1] *Caladium petiolatum*; it sometimes weighs eleven pounds.

together in a network? Now, what yon ropes are to those frail masts, prayer is to this land. Our safety and strength are the tears and supplications of God's people. These are the strong ropes that secure our vessel from destruction. Let there be plenty of these ropes. Let the chiefs pray. Let the common people pray. Let old and young pray. Especially is it the work of the Church to wrestle with God in prayer. Our ship (land) will then outride every storm.'

Work for the Feeble.—Some say that they are too old and feeble to work for Christ. Is this true? Whilst the young gaily climb the tallest trees to pluck fruit, even the aged, when provided with long hooked sticks, can bring down all the good things required for the family. 'None,' remarked Auguna, 'are too feeble or too aged to use the long hooked stick of intercessory prayer. Be always using it, and talk no more about being past service for Christ.'

Literalism.—When the Gospel was introduced to Raivavae, the king Teriaitaiti was a very aged man. Hearing the preacher one Sabbath speak from the words, 'If any man be in Christ, he is a new creature,' he was delighted above measure. When the congregation had dispersed, he anxiously inquired, 'If I give up my idols and become a convert, shall I really, lobster-like, cast off this withered form, and become young again?' It is to the old king's credit that although his hope of perpetual youth was disappointed, he did become a sincere convert to the new faith.

Christian Heroism.—A day or two after the arrival of the sad news of the slaughter of ten of our people at Kalo in New Guinea, a student touchingly remarked in his sermon, 'Many have endeavoured to dissuade

me from going to New Guinea to preach the Gospel, lest I should share the fate of my countrymen. My reply is this—Does it become us who are disciples of Jesus to be so anxious to spare our poor carcases (striking his chest) when the Son of God Himself was cruelly mangled on the cross for our redemption?'

Selfishness.—'Selfishness,' said another teacher, 'is an evil abhorred of God and man. Who cares for the man that is content to eat his food alone? He looks this way and that way to see that no one is coming to share his good things. In the low coral islet where I was born there lived a man who invented a pulley, so that he might easily pull up to the ridge-pole his basket of food if any one dropped in at meal times. As in the olden times our houses always had a second story for the storage of cocoa-nuts, the stingy man found it necessary to cut a square hole in the ceiling of the ground-floor in which he lived, so as to admit his food-basket. In the same village lived another fellow of a similar disposition. We subsist in a great measure upon pandanus drupes. Whenever this man obtained some of this tempting ripe fruit, he would slowly eat the drupes in solitude. In order the more fully to enjoy each morsel, he was in the habit of closing his eyes as he sucked out the luscious juice. Neighbours might pass and repass, but he was never known to invite any one to partake of the luxury. Having on one occasion obtained a bunch somewhat finer[1] than usual, and being in the midst of his solitary feast, an envious lad snatched up the basket with its contents and disappeared. The selfish man, discovering his loss, gave chase to the thief, but without

[1] Weighing ten pounds.

success. The names of these two stingy fellows have become a byword and a reproach amongst us.[1] Now we Christians are enjoying a rich Gospel feast, but yon heathen in New Guinea possess none of these blessings. Will you haul up your basket when you have eaten, and feel satisfied with the bountiful provision God has in His Word made for us? Will you, like my old neighbour, roll the sweet morsel about in your mouth, entirely oblivious of the spiritually destitute and famishing? If so, beware lest God deprive you of the very blessings you prize so highly.'

A Bold Metaphor.—At a grand wedding in the olden times, it was usual for the bride to walk to her future home over the backs of the prostrate bodies of her husband's clan. In like manner the bridegroom would trip over the prostrate persons of his wife's clan. In evident allusion to this remarkable custom, Matenga astonished me by saying: 'Tread boldly, brethren, on the prostrate body of Jesus; for He is our only way to the Father. Trust your entire weight—with all your burdens—on Him; He will not wince or cry. Only thus shall we safely arrive at the home of the redeemed.'

The Bible.—Itio remarked: 'All our large land-birds love to assemble on the branches of the banyan tree, in order to feed on its golden berries. Even so do God's people flock to the Word of God to feast upon its precious truths.'

Mistletoe Christians.—Throughout these islands on lofty chesnut, *buka* and other trees, may be seen a parasitic plant with articulated branches, opposite

[1] The national custom is to divide out food to all passers-by. The ideal good man is one who gives away continually.

entire leaves, and very beautiful scarlet umbelliferous unisexual flowers. The berry—which is also scarlet—bears but one seed. Pigeons feed on the fruit, and so propagate this mistletoe of the tropics from tree to tree. I once obtained a young plant which, germinating in the rainy season, had struck its roots in a green leaf,—an impressive emblem of evanescence! The native name of this shrub is *pauma;*[1] it is known to botanists as the *Loranthus insularum.* Hence the frequently-recurring simile of native preachers: 'Let not your faith in Christ be like the mistletoe (*pauma*), which may easily be torn off; but as a tree firmly rooted in the parent soil, which the severest storms cannot destroy. Be rooted and grounded in the faith.' The phrase 'mistletoe Christians' may often be heard in their prayers. There is a native proverb about this plant, 'Ask a favour, not of the mistletoe (=serf), but of the parent tree (=chief).'

Voice of the Departing Year.—'Listen,' said Manarangi, 'to the voice of the departing year. I am getting very old, my children. My back is bent, and I am compelled to use a staff to support my failing limbs. I am about to die; you will remain (in life). I leave you in the care of a new parent. Perhaps he will do better for you than I have been able to do. My sea-going chest is packed; though as yet the lid is not on and nailed down, as just a few trifling things (*i.e.* minutes) remain to be put in. My ship is heaving anchor. The wind is favourable. I must be off. And now farewell, my children. I leave you with your new parent.' This is an extract from an address delivered at a midnight family service, at the expiration

[1] Piri a pauma.

of 1880. This pious custom is almost universally observed in Rarotonga.

The Perishing Heathen.—'Listen,' said Rau, 'to an ancient story from the lips of the natives of New Guinea. Early one morning Avirikuto went wallaby hunting,[1] leaving his young brother at home with his wife. As the day wore on, the woman cooked food and ate, but gave nothing to her brother-in-law. The hungry lad, finding that he had to shift for himself, started off into the bush in search of something to eat. Espying a pandanus tree laden with ripe fruit, he climbed up and threw down a heavy bunch. The noise of the falling fruit roused from sleep a mighty serpent, that glided swiftly up the trunk, and before the boy had any idea of danger, enfolded him in its coils. The lad's terror found vent in the following song:

'Alas! my father, my father! help thy son,
Perishing on this pandanus tree!

Alas! my elder brother, my only brother!
I am perishing on this pandanus tree!'

By this time Avirikuto had returned home with the spoils of the chase. Not seeing his brother, he asked his wife what had become of him. 'He started off in search of you,' she carelessly replied. Avirikuto now went off in quest of his brother, to whom he was tenderly attached. At the foot of a neighbouring hill he caught the plaintive lament of the lost one. A few steps more and he could perceive that a deadly struggle was going on between the lad and a huge serpent. Running now at his utmost speed, he climbed

[1] A marsupial, smaller than the kangaroo, very abundant in New Guinea and Australia.

up and chopped the serpent to pieces with his axe, and saved his brother. As they walked home, Avirikuto heard the story of the lad's hunger, and becoming very angry, forthwith slew[1] his wife as the cause of his brother's peril. 'Now,' added Rau, 'this little brother exposed to hunger and deadly peril symbolises the heathen. That old serpent, Satan, has already coiled himself round and round his victim. The elder brother represents ourselves, whose duty it is to look after our less favoured relative. He is lost; seek him out at once. Can you not hear his cry for help? To the rescue! And with the axe of the Word of God let us utterly destroy the foe and save our beloved but perishing brother.'

Jeremiah viii. 20.—Samuela, a native preacher, remarked: 'Some folks sleep away the season of plenty, forgetting that a time of scarcity follows hard upon the abundance of summer. Such a man has no pit of sour bread-fruit paste to fall back upon; no store of chesnuts hidden in the earth; no plantation of gigantic taro (*i.e. kape*)[2] as a standby; no collection of old cocoa-nuts with which to sustain life during the winter months. Delighted with the abundance of summer, he is utterly unmindful of the season of scarcity to follow. Now this man will infallibly be hungry in winter, will be reduced to beg of others, and will certainly steal the food of the industrious and thoughtful. Far worse than this is a life wasted in so-called pleasure. Life is given that we may prepare for the season of cold and hunger to follow. The

[1] The disproportion between offences and punishment does not strike the heathen mind. All serious faults were visited with death

[2] A species of *Caladium*.

winter of death is drawing on. Of whom can you then beg? Improve, then, the present time to the utmost.'

The Dying.—In the olden times, when a *man* of rank was buried at Rarotonga, his adze—hafted and ready for use—was put into his right hand (the stone part resting on the shoulder); his staff was laid on his side, with his drinking-cup, &c., for his own personal use in the spirit-world. Besides this, there was the accustomed offering to Tiki—the guardian of the Rarotongan Paradise—of the head and heart of a hog, a split cocoa-nut, and a root of intoxicating *Piper mythisticum*. If the deceased were a *woman* of consideration, her cloth-beating mallet and the utensils she had been accustomed to use would be buried with her, along with the usual offering to the lord of the invisible world. The mallet would be placed in her right hand. In allusion to this ancient and almost universal practice of the Polynesians, Taraaere said: 'The dying sinner needs the one offering on Calvary, and that only, in order to appear acceptably in the presence of God.' This was impressive from the last priest of Tangaroa, about ninety years of age, who, prior to the introduction of Christianity, had been accustomed to offer human sacrifices to the tutelar god of Rarotonga.

Human Guilt.—Just outside native dwellings, in a shady place, are small platforms on which may be seen piled up the provisions of the family. It is a mark of chieftainship to have a large ironwood platform (with a ladder attached) which tenants are bound to keep supplied with all sorts of native food. Hence the frequent utterance of native preachers, 'Jesus is our strong stage (*ata toa*), on which the sins of the whole

world may be piled up day by day. This platform will never break down and put us to shame. Let us humbly carry all our sins there.'

The new King.—Of the five chiefs of Rarotonga Tinomana alone on the day of installation is seated in a canoe[1] dug out for the occasion and borne with shouts on the shoulders of the clan to the *marae*.[2] In allusion to the recent election of a new Tinomana, Taike asked in church, 'Who will bear up the canoe (=cause) of the King of kings?' To the speaker's mind Tinomana represented Jesus; the canoe His kingdom on earth, those who support it and Him who sits enthroned on it are His believing people. It was a most happy allusion to a passing event.

Closing the Eyes in Prayer.—When Papehia, one of the first teachers at Rarotonga, was on landing conducted inland, and food courteously spread before him, he of course shut his eyes, and in a low voice asked a blessing. The heathen crowding around said, 'He is weeping for the land of his birth.' They had no idea of closing their eyes in prayer, as all worship of the gods was conducted with the eyes wide open.

Rarotongan Hell.—The luckless spirit-traveller who had no present to Tiki was compelled to stay outside the Rarotongan Paradise in rain and darkness for ever, shivering with cold and hunger. Compare this with the words of St. Jude: 'To whom is reserved the blackness of darkness for ever.'

Unconscious Prophecies.—I give a translation of two of the commonest Rarotongan proverbs: 'Oh! for a Divine brother! as Tapai was wont to say.' The

[1] Of *Calophyllum inophyllum*.

[2] To the church now instead of the *marae*.

idea was for some Divine Being, equally linked on to those at enmity with each other, to interpose His authority and put an end to bloodshed. 'Oh! for a Divine protector!' How fitting on the lips of those who had but too often experienced the worthlessness of human protection and friendship. These sayings were current in Rarotonga long before the introduction of Christianity, and fairly represented the heart-weariness of thoughtful men with the old state of things. I subjoin a remarkable proverb ages ago uttered by a Rarotongan woman, whose name is lost.

E uenua te po;
E takaroronga te ao } = { Our true home is spirit-land;
This world is but the briefest resting-place.

Literally, where you may just roll over, as in sleep, ere you get up and really live. How just and beautiful!

Living Water.—A famous place of pilgrimage in Rarotonga is a perennial fountain on the central, flat-topped mountain called The Mist. A considerable volume of water from it finds its way to the edge of the cliff, and leaping over the dizzy precipice, becomes the source of all the streams which fertilise the island. 'It is even so,' said Teinaiti, 'with the Gospel. From this one source flows the living stream, which, dispersed amongst the nations of the earth, brings healing to all who are willing to drink. Whither have not these life-giving waters sped? Those who taste them shall never thirst.'

Unbelief.—'Human hearts,' said Tau, another teacher, 'are oft-times as hard to break as the top-

shells[1] (*Trochus*) of our coral reefs. You may pound and pound before the hard shell breaks and you can get at the animal within. God's Word is the stone[2] (= hammer) striking every Sabbath at our unbelief and hardness of heart; and yet some of us remain just as we were—untouched, unsaved.'

A converted Drunkard's Confession.—'All my life I have been a top-shell of the densest sort. How many of my neighbours have vainly brought stones (=good words) to pound this hard shell to pieces! But what man could not accomplish, the Holy Spirit has.' 'Is not Thy Word like a hammer that breaketh the rock in pieces?'

'Is not this a Brand plucked out of the Fire?' (Zech. iii. 2.)—At a meeting for exhortation at Avarua Temo'o rose and said: 'How applicable are these words to me and my relative Mamekai (pointing to a diminutive individual present)! But for the gospel of peace we should long ago have been cooked and eaten by the people of Arorangi. The grey-headed present know all about it; but, for the younger generation, I will relate the incident. During the period of scarcity just preceding the arrival of the first teachers, ten of us had the misfortune to displease our chief Makea-Pori, and were driven away from this part of the island. We took refuge with relatives at Arorangi, under the wing of the chief Tinomana. For awhile we lived in peace. One day a mighty oven was to be prepared, and of course we had to help. The oven was dug out; the stones were being heated; the necessary wrapping leaves had been collected; and we had

[1] One of the hardest shells known.

[2] The only hammer of the olden times.

started off to get gigantic fern-roots for baking. At this critical moment Nenei-Tuaivi met us and said, "This great oven is for *you strangers*. *You* are to be the relish for the insipid fern-roots. This has all been planned by Tuikaa (the warrior and factotum of Tinomana), in order to give the clan a treat." Now Nenei-Tuaivi himself was a man of position in the tribe of Tinomana. He proposed that we strangers should make a pretended attack upon *him*, and he would fall to the earth as if killed. This was agreed to. A party of Arorangi men, armed with clubs and spears, now came in sight, thinking it high time to kill their guests. We at once seized our weapons, and made a furious rush upon Nenei-Tuaivi, who fell heavily, as if dead. The cowardly cannibals, seeing so distinguished a warrior fall, took flight, thus giving us an opportunity to escape. But one of our party, a lad of some ten or eleven summers, was left behind. Would he live or die? Being too young to fight or run away, he was hidden away by the friendly Nenei-Tuaivi under a pile of banana and other leaves collected for the oven. There lay little Butu, scarcely daring to breathe, until all was quiet, when he was safely conveyed to his parents on this side of the island. The old cannibal Tuikaa was exceedingly chagrined to learn in after days how he had been cheated out of a meal; especially that the lad should have been hiding within a few yards of him, Butu would have been so Mamekai (nicely brown for eating), —the nickname by which he was ever afterwards known.'

The speaker Temo'o was one of the ten strangers. It was his club that seemingly felled Nenei-Tuaivi.

The fugitives were kindly received by Makea-Pori. About that time, the Rev. J. Williams brought the first preachers of the Gospel to this island of cannibals, and human life for the first time in their history became sacred. Timo'o and Mamekai were for many years consistent members of the Church. Both have passed away to the better land; the latter died on the 3rd of August, 1879. In a lovely sequestered valley at Arorangi—the stronghold of Tinomana's clan—the oven may still be seen. Standing over it, I have heard the narrative from the lips of an Arorangi warrior who took an active part in the events of that day. The inveterate cannibal Tuikaa gave up his cruel practices and became a disciple (outwardly at least). He died in the days of Papehia, before Christianity had attained its full power.

Life.—Sumeo[1] beautifully remarked: 'Our life is as a little bird carried in the Master's hand. He opens His hand—it is gone!'

An Awakened Conscience.—A fishing hawk, about the size of a pigeon, with black eyes and dark plumage, excepting underneath, where it is white, was formerly extremely plentiful at Rarotonga. Its home is in the crannies of almost inaccessible rocks. The Koputu (such is its name) lays but two eggs—exactly like those of a duck in size and colour—in the season. It is considered by the natives to be excellent eating. A favourite pastime of young men in the olden time was to catch these birds in the breeding season at the risk of their lives. The plan was to lower a lad over the edge of a cliff with a stout coir rope round his waist, the upper end passed round the trunk of a tree

[1] A Samoan teacher in New Guinea.

and firmly grasped by a near[1] relative. A basket slung round the neck would soon be filled with dead birds, and the lad hauled up again.

It is a curious circumstance that when this fishing-hawk is thus surprised—provided the eye of the fowler is steadily fixed on the *Koputu*—it makes no attempt to fly and is easily caught by the hand. In its terror *it drops real tears*, whilst uttering a low plaintive cry. But should the lad chance to blink or look away for a second, the bird is gone. With firmly closed wings, it drops down into the air beneath as if dead; until, feeling itself at a safe distance from its foe, it expands its wings and exultingly goes on its way.

I once heard a native preacher, in allusion to Isaiah xxxviii. 14, describe the penitent as terror-striken at the thought of his peril and weeping, *Koputu*-like, before God!

Strait is the Gate.—In the still waters of our lagoons, almost covered with sand or slime, but firmly moored by its byssus to the coral bottom, is a species of *Pinna*, or 'Rock-fish.' This delicate bivalve stands erect, with the larger end *a little open*,—often occasioning terrible gashes in the unshod feet of native fishermen. It is longitudinally ribbed, and armed with rows of small prickles. The hinge is without teeth, and the valves are closely united by a ligament. The sort found in these islands is appropriately known as the axe-head. The native name is Kokota.

In the Rarotongan translation of Matt. vii. 14, 'Strait is the gate,' &c., the word used is *kokota*. A very literal translation of the native would run

[1] Usually a brother; distant relatives were not trusted.

thus,—'As narrow as the slightly opening *Pinna* is the gate,' &c.

A Well-spent Sabbath.—Hora remarked: 'You came to the house of God empty; may you go home with abundance! In our own homes, if the head of the family takes with him his tackle and basket and goes fishing, and by-and-by comes home with his basket full, how agreeable the wife and children are! Everything is pleasant for the rest of the day. But sometimes he comes home with an empty basket! What then? The wife turns her back[1] to him, and the children scamper off to provide for themselves. Ah! if we can get our baskets filled with good things in the house of God on the Lord's day, everything will go right in our homes for the rest of the week!'

Hosea ii. 7.—On a New Year's day Hora said: 'I fear that some (women) present know all about this from painful experience. Your first and lawful husband was elderly; but he was never weary of going to the mountains for plantains. He would then go fishing to get a relish. Finally he would cook[2] plantains and fish, and lovingly call his wife to eat. His pleasure was to see his wife handsomely dressed. In everything he studied her comfort. But, alas! a tempter came, and you start off to some distant island with him. In a little time you heartily repent of your folly. He must be always well dressed; you may go in rags. Instead of his procuring the daily supply of

[1] This is a native woman's way of showing anger. All squat on the floor in a narrow space. This is an exact picture of native life.

[2] In most of the islands of the Hervey group, *women* cook. At Rarotonga *men* perform that service. It is impossible to give in English the humour of the original.

food, you have to get it, and cook it in order to feed this selfish, lazy fellow. Worst of all, you get many a beating. You are a mere slave.

'Thy Maker is thy husband. He fed thee, clothed thee, loved thee; who so gentle and forbearing as He? But after awhile Satan came along and led thee astray. Now he is utterly selfish. He cares only for himself, not for thee. He has given thee many a beating. There is worse in reserve. Then say to-day, "I will go and return to my first husband; for then it was better with me than now." '

Jeremiah xii. 5.—On the N.E. of Rarotonga, in a district called Tupapa, is a sequestered fountain, around which hovers a famous legend.

An ancient woman, named Peû, dwelt alone in a hut close to this fountain. She delighted in the constant employment of beating out native cloth[1] with wooden mallets. An enclosure of snow-white pebbles surrounded her dwelling, to which a narrow path, shaded on either side by graceful *ti*[2] trees, led the way. Hard by was a flourishing plantation of *kape*,[3] as a stand-by in seasons of scarcity.

On one occasion Ono the handsome,[4] with his younger brothers, went to this fountain to bathe. Just as one of his brothers was preparing to plunge, Ono in pity warned the old woman in the following song:—

'Oh! Peû escape;
Else a mighty flood will sweep thee away.

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[1] Made from the inner bark of the paper mulberry (*Broussonetia papyrifera*).

[2] *Cordyline terminalis.*

[3] *Colocasia.*

[4] Or ruddy. This Ono is evidently a Rarotongan Hercules.

Its errand is for thee.
It will be a flood of such violence
That nothing may withstand.'

To which Peû calmly responded:—

'Peû fears not the flood,
She will *not* be swept away.
Peû too is mighty.
Did not famed warriors from Iva[1]
Come to this fountain to bathe?
Yet Peû remained unharmed.'

Ono inquired, when the warriors from Iva came here to bathe, did the waters retain their usual level? 'Yes,' replied Peû, with perfect indifference, still beating out her cloth. At this the bather plunged down into the fountain, and the waters instantly rose to the edges of the snow-white pebbles surrounding the dwelling of Peû, and carried away the *ti* trees and the plantation of *kape*. Ono now inquired of the unmoved Peû, who still plied her mallet, 'Is there nothing alarming to you in the present height of the waters?' 'Nothing whatever,' replied the fated woman.

After a pause, Ono again begged Peû to save herself by flight, chanting as before—

'Oh! Peû escape;
Else a mighty flood will sweep thee away.
Its errand is for thee.
It will be a flood of violence
That nothing may withstand.'

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[1] 'Iva' is believed to be Nukuhiva. This myth evidently originated in the memory of some disastrous freshet of overwhelming violence. Natives are often carried out to sea in this way, but being excellent swimmers are rarely drowned.

To which, as previously, Peû calmly responded :—

'Peû fears not the flood,
She will not be swept away.
Peû too is mighty.
Did not famed warriors from Iva
Come to this fountain to bathe?
Yet Peû remained unharmed.'

At this another brother of Ono leaped down, and the surging waters rose to the very entrance to her dwelling. Ono again inquired of the unmoved Peû, who was still beating out her cloth, 'Is there nothing alarming to you in the present height of the water?' 'Nothing whatever,' responded the doomed woman.

After another pause, Ono once more entreated Peû to fly, chanting as before :—

'Oh, Peû, escape,
Else a still mightier flood will sweep thee away.
Its errand is for thee.
It will be a flood of such violence
That nothing may withstand.'

To which, as previously, Peû calmly replied :—

'Peû fears not the flood.
She will not be swept away.
Peû too is mighty.
Did not famed warriors from Iva
Come to this fountain to bathe?
Yet Peû remained unharmed.'

Adding these stinging words :

'Is it in thy power to harm Peû?'

At this Ono drew himself up in all his offended might and plunged into the waters, which at once rose tumultuously and swept away Peû with her

implements and dwelling into the ocean—she swimming and still defiantly beating out her cloth with her mallet.

Such, said Teaoa, is the fable handed down from ancient times. Is it not a vivid picture of the fate of obstinate sinners, who, although warned by the voice of the Gospel again and again, turn a deaf ear, and eventually are swept away by the flood of God's anger? Their ruling passion goes with them to the end.

How often have I heard this favourite illustration (much abbreviated) from the lips of native preachers! However drowsy they may have felt in church with the thermometer at 90°, they instantly wake up. Sometimes the unconverted are addressed thus; 'Alas! for Peû and her friends.' I have seen a most effective scenic representation of this legend at their May festivities.

True Faith.—Whilst true faith is like the 'heart' of iron-wood,[1] (almost) imperishable, mere attachment to the forms of Christian worship is the outer white covering of this 'heart,' which speedily rots away.

'Could not for the Press' (Luke xix. 3). Vaka said: 'I too want to see Jesus, but cannot for the press. You ask me, who are they? I tell you frankly, they are my sins innumerable, crowding about me day and night. Perhaps if I climb up the tree of faith and prayer, I may, like Zaccheus, see Him yet, and get a blessing.'

The Outrigger.—The natives sometimes speak of Divine grace as 'the outrigger of their soul' (te ama o te vaerua).

[1] *Casuarina equisetifolia.*

Every canoe is furnished with an outrigger, to prevent its upsetting. A great deal of care is required in selecting and securing a suitable one. Sometimes, when sailing out to sea, the fastenings of the outrigger become loosened. If so, woe betide the unhappy voyager! What the outrigger is to the canoe, God is to the human soul. Alas for the spirit-voyager if he loses his hold of God!

Warning Despised.—It was anciently believed that certain birds were appointed by the gods to give warning of impending danger. One of these birds, sacred to Tane, was the 'kerearako,' or Polynesian linnet, with its pretty brown back and tail, but yellow throat and breast. This sociable little bird builds its nest in low trees and bushes. Occasionally a pair in their gambols delight to rush out of their leafy covert to startle the passenger by their sudden appearance and equally sudden departure.

Another famous mouth-piece of Tane is the 'kauā,' a bird of the kingfisher kind, of variegated plumage, and somewhat larger than a pigeon. The beak of the 'kauā' is six inches long. It is constantly seen on the reef watching for small fish. It is considered to be good eating by the natives, the tribe of Tane excepted. It has only one cry, 'kauā,' which is pronounced most distinctly, and gives the bird its name.

The linnets always fly in couples; the 'kauā' either singly or in flocks. The insecurity of human life induced the people to regard the cry of these birds as a Divine intimation to flee from a foe close at hand. Doubtless the intrusion of armed men upon their haunts would disturb them, and cause the winged messengers of the gods to give forth their accustomed notes of alarm.

After the battle of Arira, Itieve lived with his chief Raumea in Veitatei, on a gentle slope facing the evergreen taro plantations. The chief grew fearful of the marvellous strength of his king Kanune, and therefore watching his opportunity, killed him with a blow of a stone adze. A drop of royal blood chanced to fall on a piece of cocoa-nut lying on the ground. Itieve foolishly wiped off the blood and ate the nut.

A female slave present was greatly enraged with Itieve for his impiety, and resolved that he should atone for his sin with his life. In the clan of Ruanae was a man named Kekeia (thief), related to Itieve and to herself. One morning she gained secret intelligence that a foraging party from the Cave of the Tern was in the neighbourhood. She contrived to steal off unobserved, in order to tell her grievance to Kekeia, who at once caught at her drift, and desired her to request their mutual relative Itieve to meet him early next morning at the top of the hill Maungarua, about half a mile from their home. Itieve went most cheerfully (but without the knowledge of his chief) to meet Kekeia, little thinking that he was going to certain destruction.

Passing through the taro-patches, and skirting the lake, he entered a dense growth of hibiscus, which at that time covered the foot of the hill, where the appointed meeting was to take place. At this moment a 'kauā' suddenly darted out of the bush, and shrieked 'kauā' just over his head, as if to warn him of imminent danger. Itieve said to the beautiful bird, 'Ao, Tane koe e karanga nei,' *i.e.*, 'Aye, Tane, it is thou who art warning me.' Notwithstanding, he went heedlessly on his way.

Itieve had ascended but a few steps when this friendly bird again crossed his path, and shouted in his ears, 'kauā!' Again the doomed man called out to the bird, 'Ao, Tane koe e karanga nei'—'Aye, Tane, it is thou who art warning me.' Despite this second warning, Itieve went on laboriously climbing the steep sides of Maungarua. In those days the path was narrow and circuitous. At the top lay the warriors of Ruanae, hidden in the thick fern and tufts of reeds.

Itieve was only half-way up, still within reach of safety had he taken the oft-repeated warning and ran back to the valley, where the cannibal tribe would not have followed him. At this critical moment, for the third and last time, the friendly monitor flew close to his head again, shrieking, 'kauā!' A third time Itieve said, 'Ao, Tane koe e karanga nei'—'Aye, Tane, it is thou who art warning me.' Still the infatuated man pursued his way, and soon caught sight of his relative Kekeia sitting under a great iron-wood tree, with a curious smile on his face. Itieve stopped and requested him to step down, lest Raumea should see him from the crest of the opposite hill in treaty with his foes.

Kekeia refused to do so, and blandly told his cousin to dismiss his fears. Still Itieve did not move a step. Did he feel a misgiving? By this time his concealed foes had crept round through the fern and bush, enclosing him on every side. Kekeia, seeing that his prey was secure, now rose and shouted, 'Taumaa, e Rongo, toou ika'—'Rongo, seize thy prey.' At this preconcerted signal the armed men rose as if by magic out of the earth, and clave the skull of Itieve. A long

spear was thrust through his body, and he who had despised the threefold warning of the gods was carried off with shouts of triumph, between two men, to the gloomy cave at Ivirua, and there cooked and eaten! Over Itieve was registered a vow to treat similarly all who might hereafter fall into their hands.

'Such,' said Kakorua, 'is the story handed down by our forefathers. Now this Kekeia fitly represents the devil. Is he not a thief?' (playing on the name). 'Are we not told that he goes about seeking whom he may devour?

'But we are not left without warning. The voice of God, by His Word and His Providence, calls to us to "Turn and live." But sinners go on heedlessly to certain death. The kauā called thrice to Itieve; God continually calls to us. But in vain! Go on then, sinner, until at last, when too late, thou discover thy mistake, and thy soul is borne by fiends to hell!

'"He that being often reproved hardeneth his neck, shall suddenly be destroyed, and that without remedy."'

A Lost Soul.—In the olden time, when a grand feast was resolved on, one half the island received the other half as guests. These guests were expected to prepare large quantities of fine native cloth as gifts to those who had been starving themselves for months in order to feast them. Great numbers of small canoes were made, each paddled by one person. Their first two trips were made by daylight, in honour of the firstborn sons and daughters. Each tribe would launch a canoe in honour of their particular god; thus one would be for Motoro, another for Tiaio, a third for Tane, a fourth for Turanga, &c. The head of each family was

usually in charge of these 'divine canoes' (*vaka tuarangi*).

Early in the morning they would start off, returning ere midday with their spoil. If any were unsuccessful, the fortunate would make a contribution in favour of their unfortunate companions. If there still remained a destitute canoe, it was called a *vaka kirikiri* = 'canoe with only a pebble in it.'

The first business of the fisherman on landing was to make an offering to the gods. Each would string a fish—the smallest—and send it to his family *marae*, to be hung up on a notch or lopped branch set apart for the purpose. Such offerings became food for rats. But if a canoe came ashore without any success whatever, the owner's resource was to pick up a white coral pebble with a hole in it, string it, and send it to be hung up in the *marae* in lieu of a fish.

The gods having been thus duly honoured, a fire was now lighted on the beach, and the remainder of the fish cooked, and there devoured by the fishermen and firstborn sons. Thus the first morning's catch was in honour of the eldest male children and their gods.

On the following morning these 'divine canoes' returned to the ocean in honour of the first-born girls and their gods; not that the girls themselves ever went in them. As soon as the ceremonies were completed, the *tapu* was removed, and the real business of fishing for the feast commenced on the following night. Old canoes might now be used without danger of offence to the gods.

And so, too, of ordinary fishing. Upon landing an offering must be made to Ruaatu, the fisherman's god.

Each canoe of the tiny fleet must make a contribution of a small fish, or, in default of that, a hollow pebble, to be strung into a sort of necklace on the midrib of the cocoa-nut leaf, and thrown into the darkness with these words: 'Here is thy share, O Ruaatu!' Hence the proverb applied to any one unsuccessful in his projects: *tena te vaka kirikiri*='there goes a canoe with only a pebble in it.'

In these Christian times, when a person dies in an unsatisfactory state of mind, it is mournfully said, 'Alas, for this canoe with only a pebble!' The idea is that the departed, during all the years he has been listening to the Word of Life, has caught nothing whatever; and now, on reaching the eternal shore, has no suitable offering to present to the Great Judge to evince the good use made of the numerous talents committed to his care in life. The empty canoe is the lost soul!

In public prayer it is common to ask that at the close of the service the hearers may not be *vaka kirikiri*, or canoes with only a pebble apiece!

In contrast to this, when a person dies leaving good evidence of his faith in the Saviour, it is said, *kua tomo te vaka*='his canoe is well laden.'

'**Your Goodness is as a Morning Cloud, and as the Early Dew it Goeth Away**' (Hosea vi. 4).—'It was fabled by our ancestors that all tree-fruits (bread-fruit, chesnuts, &c.) belong to Tangaroa, who, after permitting mankind to get a sight and a taste, removes them to other lands (in winter). But the good things of Rongo (taro, bananas, &c.) last all the year round.'

'Let not our goodness,' remarked Taoi, 'be like

these gifts of Tangaroa, pleasant to look upon, but evanescent; let them rather resemble the enduring gifts of Rongo.'

Vaitamana's Speech.—At one of our new year's gatherings a venerable old man with silvered locks, named Vaitamana, stood up and said, 'Young people, look on me. Do you know that I was one of those appointed for sacrifice to Rongo? These ears and this nose of mine were to have been cut off and divided out to each chief in token of office. This head was, in the phrase of those days, "e kuto roroi"—"a feast provider." It would not actually be eaten; but until I or some other suitable victim had been offered to the god of war, no culture of the soil was lawful, and no feasting permitted; bloodshedding alone being the order of the day.

'Our family was one devoted to sacrifice; our god being Utakea, long since taken away with the rest by "Wiliamu" (Rev. J. Williams). Most of my ancestors in past generations have been slain, and then placed on the altar of Rongo. Without a human sacrifice the drum of peace could not be beaten, nor a new paramount chief be appointed.

'The first narrow escape I can recollect was a day or two after the battle of Rangiura, when Makitaka became supreme lord of Mangaia. I was then a mere youth, and, passing alone over the hills, fell in with two armed men, Patiki and Tavare, who were in search of a suitable sacrifice. Patiki seized me by the arm, and said to his companion, "This will do." But, to my great joy, Tavare released me, declaring that I should not die, for I was his near relative. They passed on, and I fled home as fast as my legs could carry me. It

then dawned upon my mind for the first time that at some future period I, too, should be offered in sacrifice.

'But the presidency of Makitaka was unfortunate. There was nothing to eat but candle-nuts and wild innutritious roots. It was evident that the gods were displeased; a new "lord of Mangaia" must be chosen. The chief fixed upon was Pangemiro. New sacrifices to the god Rongo were required to ratify the change. I was carefully hidden by relatives of the dominant tribe not eligible for sacrifice, until we heard that Teata was slain and offered on the altar of the god of war.

'At that period my uncle Kariuna, not many years older than myself, lived under the protection of Meduatipoki, not far from my home in Veitatei. Little did he dream of danger one morning when he watched the chief Kino, accompanied by a few friends, crossing the hills from Ivirua, and making for his guardian's dwelling. Kino asked Meduatipoki to let him have "te manga panako," *i.e.*, "insignificant minnow" yonder. Consent was at once given, and in a few minutes my poor uncle was clubbed and borne all warm to Rongo's bloody altar. As Kino advanced to kill him, he made no attempt to escape—for to whom could he go?

'During the reign of Pangemiro I lived secure, took a wife, and became a parent. But Kaitamaki, priest of our god Utakea, was slain, and Teao contested with Pangemiro the temporal lordship at the battle of Araeva, the last heathen fight. A second time the chieftainship fell to the victorious Pangemiro. A human sacrifice was again required, and I trembled lest I should be fixed upon.

'With the rest of the conquered party, I lived after

the battle at Butoa. On one occasion a party of us went to our old quarters at Veitatei to carry "ranga-ranga," *i.e.*, a contrivance to prevent cocoa-nut trees from being robbed at night. Being overtaken by darkness, we slept at Veitatei. On our way home on the following morning I paid a visit to an aged relative residing in a very secluded spot. As soon as Teare saw me, he said, "Fly for your life. Yonder are Erui and others waiting to kill you and offer you in sacrifice." I was not slow in taking the old man's advice; and when I had gained the other side of the taro plantations, I saw the killing party walking discontentedly away.

'Ten days afterwards we heard that Erui had slain the beautiful Makimaki, the young wife of one of our number. I felt angry with Erui, himself one of the vanquished, for thus meanly striving to ingratiate himself with the victorious party. Shortly after the first teachers came to our island.

'But for the Gospel you would not see my face this day. Now we all live in peace, as our ancestors never could. They longed to see a period of peace and of plenty, but passed away without ever enjoying such privileges. Let us value our mercies. They all flow to us through the Son of God, who offered Himself on Calvary to save us from eternal death. For more than thirty years I have served Christ.'

Parleying with the Tempter.—The only daughter of Vaitooringa and Ngaetua was Ina, whose brothers were Tangikūkū and Rupe. The parents of Ina were the wealthiest people in the land of Nukutere, boasting, as they did, of a rich breast-ornament, abundance of finely-braided hair, beautiful white shells worn on the arms, and, more precious than all these, a gorgeous

head-dress of scarlet and black feathers, with a frontlet of berries of the brightest red.

Early one morning the parents, for the first time in their lives, left their home in the care of Ina; the mother charging her to put these treasures out to air; but, should the sun be clouded, to be sure to take them back into the house. For Ngaetua knew well that in the bright beams of the sun the arch-thief Ngana would not dare to come; but if exposed on a lowering, cloudy day, the envious foe would not fail to try to rob them of their treasures.

The parents went on their way, and the sun shone brightly. Not a cloud could anywhere be seen. The dutiful Ina carefully spread out these treasures on a piece of purest white tapa. But the arch-foe, Ngana, was on the watch. He knew that Ina was left all alone with the treasures of her parents. Very cautiously did he approach through the neighbouring bushes, in order to get a good sight of these much-coveted articles. He forthwith used an incantation, so that the sun suddenly became obscured. During this partial darkness, Ngana boldly emerged from the thicket, and tried to seize the long-wished-for ornaments. But the watchful Ina was too quick in her movements to permit this. Ngana now, with affected humility, begged permission merely to admire and to try on the various ornaments, for her to see how he would look in them. Ina was very loth, but after great persuasion, consented that Ngana should put them on inside the house. To prevent the possibility of his taking away any of these treasures, she closed the doors. The crafty thief now arrayed himself in these gorgeous adornments, excepting the head-dress, which Ina still

held in her hand. Ngana, by his soft words, at length induced her to give that up too. Thus completely arrayed, he began to dance with delight; he made the entire circuit of the house, careering round and round, in hope of seeing some loophole through which he might escape with his spoil. At last he espied a little triangular hole at the gable-end, a few inches wide, through which, at a single bound, the thievish Ngana took his flight, and for ever disappeared with the treasures. Ina, who at first had been delighted with the dancing of her visitor, was in utter despair as she helplessly witnessed his flight and heard the parting words:

'Beware of listening to vain words,
O Ina, the fair and well-meaning.'

Not long afterwards the parents of Ina came back in great haste, for they had seen the arch-thief gliding swiftly through the air, magnificently attired. At this sight, a fear crept over them that all was not right with their own treasures. They anxiously asked the weeping girl the cause of her tears. 'Your choicest treasures are gone,' she sobbed. 'But is there nothing left?' demanded the parents. 'Nothing whatever,' said the unhappy girl.

'Satan,' said Mamae, a native teacher, in one of his sermons, 'is the arch-foe of mankind. He came to Eve in the guise of friendship, and when she was alone. By fair words he persuaded her to disobey, and thus sin and death entered this world. It is even so now with us, the children of Eve. Let us, then, beware of parleying with the tempter. To parley is to allow him to gain his end, and we shall be deprived of all those spiritual graces and comforts which God intended us to enjoy.'

Psalm cxxv. 2.—The island of Mangaia is surrounded not only with a fringing reef of living coral, but also by an unbroken wall of uplifted dead coral rising to about one hundred and fifty feet above the level of the sea. This vast mass of dead coral, like a natural rampart, effectually defends the valleys of the interior from any possible irruption of the ocean and from the violence of the hurricane. This geological curiosity is called by the islanders the *makatea*, in contradistinction from the hills in the interior.

Mamae once remarked, when preaching from Psa. cxxv. 2, 'As this lofty wall entirely incloses our little island, so the Lord is round about His people from henceforth even for ever. There is no flaw or gap in this Eternal Rampart.'

The Living God.—Motoro, whose ugly form may be seen in the Museum of the London Missionary Society, was proudly called 'The living god' (*te io ora*), as he alone of 'the gods of day' would not permit his worshippers to be offered in sacrifice. The other divinities were, by the heathen themselves, styled 'Dead gods' (*io mate*), as their worshippers were at all times eligible for sacrifice.

The word 'io,' commonly used for 'god,' properly means 'pith,' or 'core of a tree.' What the core is to the tree, the god was believed to be to the man. In other words, the gods were the life of mankind. Even when a worshipper of Motoro was slain in fair fight, it was imagined that the enraged divinity would be sure, by some special disease or misfortune, to cause the death of the offender. Most appropriately and beautifully do the Christian natives transfer the name 'io ora,' the living God, to Jehovah, as His worshippers

never die! 'And I give unto them eternal life; and they shall never perish.'

'The Inseparables!' or, Christ and the Christian.—The twin children of Potiki were a girl named 'Inseparable' (Piri-ere-ua), and a boy. These children grew up to be very fond of each other; whatever the sister wished the brother agreed to. Unfortunately for the peace of their household, their mother, Tara-korekore [1] was a scold, and gave the children no peace. One night the mother went torch-fishing on the reef. The tide rising at midnight put an end to her sport; but not before she had obtained a basketful of small bony red fish called *kūkū*. Upon arriving home, according to invariable native custom, she woke her husband and cooked the fish. Four divisions were made, the parents eating their portions at once. The mother did not agree to her husband's suggestion to wake up the children to partake of the warm and savoury midnight feast. However, she carefully put away their portions into their baskets.[2]

Now 'Inseparable' and her twin brother were all the time awake, but did not let their parents know the circumstance. They waited to be fetched to share the good things going, but they waited in vain, and learnt that they must wait on till morning, when the meal would be cold and unsavoury. The twins wept secretly. As soon as their parents were soundly asleep, 'Inseparable' proposed to her brother that they should flee away for ever. At first the boy hesitated, but

[1] 'Never-speak-at-all.' There is a play upon her name.

[2] Throughout the islands each member of the family has a separate basket, so that if hungry at night he should go to his own, and not encroach upon his neighbour's.

eventually agreed. Cautiously opening the sliding door of their house, they started on their journey. Upon reaching an elevated point of rock, they sat down and again wept, each filling a little natural hollow in the rock with their parting tears. At last they leaped up into the sky, 'Inseparable' holding firmly on to the knotted end of her brother's girdle.

As soon as the morning star became visible, the mother went to rouse the children, so that they might eat the fish and taro. But they were gone! Their little bed of fragrant dried grass was cold, though moist with tears. Hastily summoning her husband, a strict search was made; the path taken by the twins was traced by their tears. The little hollows filled from their eyes revealed the spot where they had last rested on earth. No further trace could be discovered. In utter perplexity the sorrowing parents looked up at the sky, where the sun had not yet risen, and to their astonishment saw their beloved children shining brightly there! Vainly did they call upon them to return to earth. At length father and mother leaped right up into the heavens, in hot pursuit of the twins. But the children had got the start of their parents, and made the best of their way through the azure vault. The chase is still going on; but the parents have never yet succeeded in overtaking their truant children. All four shine brightly; the parents naturally exceeding their children in brilliancy. Brother and dearly-loved sister, still linked together, pursue their unceasing flight through the heavens.

'Inseparable' and her brother are the double star, μ^1 and μ^2 Scorpii. The irate parents are the two bright stars, υ and λ Scorpii. The Rev. W. Ellis, in his

Researches erroneously calls them '‘Gemini.' The constellation is known throughout the Hervey group as *Piri-ere-ua-ma* or ‘The Inseparables.'

I once heard Mamae say, in his sermon, that Christ and the Christian should be like these twins stars, ever linked together—come life, come death—being destined to shine for ever in a brighter world. The allusion was happy, being perfectly understood by all his auditory, down to the youngest child.

'Born of a Woman.'—Mangaia was anciently ruled by the kings, in the name of the invisible gods. These supreme spiritual rulers, though of a distinct and superior family—claiming descent from great Rongo, father of gods and chiefs—must, on the maternal side, be related to the common people. Native Christians speak of Jesus, the visible representation of the invisible and only true God, and the supreme Ruler of the universe, as being allied to us poor sinful creatures in a similar way (ivi tama vaine).

The Heathen.—The first Samoan teacher in New Guinea remarked at a farewell meeting at Rarotonga: ‘At Samoa the old men stay at home to heat the oven and cook the food. It is for the young men to go far away into the bush to collect and carry home bread-fruit, bananas, plantains and taro for the oven. Let it be even thus with us to-day. Let aged Christians stay at home to enjoy their Gospel privileges, whilst we youngsters are off to New Guinea to gather in souls for Christ.'

The Unrenewed Heart.—The queen annually visits each dwelling, to see if all is clean and neat. As the day is fixed a month beforehand, a great deal of white-

washing and painting is done for the occasion. Fragrant grass, brought from the mountain-slope and dried in the sun, is scattered over the old. New mats are spread over the grass. The pathway to the house is strewn with snow-white pebbles from the beach. And the inmates are dressed in their best to welcome the queen with the usual present.

In allusion to the visitation of 1883, Anguna said: 'How beautiful our homes looked yesterday. But the glory of paint and whitewash will soon fade. Already the new mats are rolled up and put safely away. In a few months the new grass will be as rotten as that underneath, and vermin[1] will be more abundant than ever. Now, is this to be a correct picture of our hearts in the sight of God? I note with sadness the evil ways of our heathen ancestors cropping up again. Some of you professors endure but for awhile. The secret is this, *underneath the clean mat and grass of good profession lies concealed the corrupt old nature,* "Ye must be born again."'

Wild Ducks.—Tuārae said: 'Have you never watched a flock of wild ducks disporting themselves on the surface of a clear pond? How they sip the water, dive down after plants and other food! After a time, flapping their wings, they make a universal plunge into the soft mud at the bottom, and rising to the surface wing their flight.

'Alas! that it should be even thus with some who attend the means of grace, and profess to be changed. Changed indeed they were, outwardly, for a time; even

[1] They swarm in native dwellings. Beetles and earwigs sometimes enter the ears of sleepers. I have extracted several. These earwigs are perfectly black.

praying in public, and taking part in Gospel ordinances. But after awhile, like the ducks, they dived into the filth and mud of this world; and to-day where are they?'

A Farewell.—Until recently the only garments worn by the Harvey Islanders were prepared from the inner bark of the paper mulberry-tree (*Broussonetia papyrifera*), beaten out with wooden mallets and figured. A lining of the same material was roughly pasted on.

In allusion to this, Samuela, taking his farewell of the church at Avarua, said: 'Although born on a different island, we have been one, like the choice garments of our ancestors. The paste[1]—the uniting principle—has been the Gospel. To-day we are separated, as those pasted garments of old were apt to be. Do *you*, the garment itself (=the church) remain in all your beauty; *I*, the mere lining, go. Follow me with your prayers.'

A Divided Heart.—Old Raroê remarked: 'In the olden time I had two wives. And what was the result? There was no peace for me day or night, on account of the jealousy and scolding of these women. Christianity came, and I put away one of my wives. Now peace reigned in my home.

'It is even thus with a heart divided between Christ and the world. Choose one or the other. Don't strive to keep both. Be Christ's wholly; and then, as a spouse united to one Lord, you will dwell in perfect peace.'

Canoe-launching.—'Our canoe is being launched.

[1] Made of arrow-root moistened with water, cooked in a leaf on a wood fire. Pottery was unknown.

She[1] is on the outer edge of the reef. The surf every second lifts her higher. The crew stand around, awaiting the favourable moment to start on their projected voyage. Shall we launch her? No; the incoming wave is too short. Now, perhaps, is the time? No; she will capsize. Look alive; here comes the long billow. Now is the right moment. Shove her off; scramble in. She is shooting through the white foam to the blue ocean beyond!'

To Luka, the impassioned speaker, and to his audience the canoe represented the offers of eternal life made in the Gospel. Now is the accepted time. A moment's delay, and it may be too late.

It is a most interesting thing to witness the launching of a canoe, in a rough sea, on a coral island where no opening exists. The ninth wave is the right one. An error in judgment involves the swamping of the canoe, and sometimes loss of life.

Death.—'The taro-leaves are afloat' (kua taataa rau taro), *i.e.*, death is near. In this ancient proverb the figure is of a taro-patch filling up with heavy rain. Inch by inch the water rises, until the taro-leaves seem to float on the surface. A few moments more, and they are submerged! Our native preachers often thus intimate the nearness of death.

To Prophesy in the Rarotongan dialect is 'to point at with the index finger.' How apt! for every true prophet is a seer, perceiving distinctly in the far distance of time what is invisible to other eyes; he then by wise words *points* men to that blessed Object. Is this pre-adaptation of a heathen language to Christian purposes accidental? I trow not.

[1] In these Polynesian dialects a canoe is 'it.'

Backsliding.—With sorrowful reference to his own shortcomings, Tepo remarked: 'If you chance to soil a new garment, you may wash and iron it, but it will never be as pleasing to look upon as at first. Each time it is resoiled, do what you will, there is an evident deterioration.' I was touched at this humble confession, and pointed out the necessity for Divine help to lead a new life.

Fragments of Native Prayers.—*Before Service.*—'O God, grant that as the dew of heaven moistens every leaf and plant, even so may Thy Holy Spirit descend this day on our parched hearts, causing them to bud and blossom before Thee.'

Kiro prayed thus: 'O Lord, cause the young men of this village, who are now like wild hogs in the bush grubbing and rooting about in their sins, to give up all their evil ways.'

'May Thy Holy Spirit now, as on the day of Pentecost, sweep over our hearts like a cyclone in its fury, destroying all obstacles and uprooting forest trees—the growth of ages' (evil habits of long standing). To a congregation who had often witnessed what a cyclone *can* do, the allusion was most impressive.

Vakatini's prayer:—

'May the reign of Satan be as brief as the mountain torrent—overflowing its banks in the morning during the rain-storm, but dry at night.' All the streams here are of this description.

Another day Vakatini commenced thus:—

'O thou Mighty Tree, under whose grateful shadow we rest,' &c. &c.

The central mountain of Rarotonga—covered with

timber and tall ferns—is appropriately named 'The Mist,' as a dense mist hangs over it every morning. In allusion to this, a young man prayed: 'As a thick mist covers the crest of yon mountain until the trade-wind wakes and drives it clean away, so may our many sins be swept utterly away by the grace of Christ.'

At a Saturday afternoon's prayer-meeting:—

'To-morrow may new heads be laid on the altar of Jesus.' This common petition is in allusion to the ancient practice of presenting the heads of all slain in battle to Tangaroa, the tutelar deity of Rarotonga. The native mind cannot see the incongruity of this allusion.

'May the word preached stick in the minds of the ungodly like a fish-bone in the throat, that cannot be got rid of.'

Taunga asked, 'That as we cheerfully serve our chiefs with offerings of food, or with the work of our hands, so we may ungrudgingly serve the King of kings.'

'May our missionary be as a candle-nut torch, not soon to go out; and may his thoughts not soon turn to the land of his birth.'

'May the professions of these new converts *not* be like the bread-fruits which now (April) load the trees, —so soon to pass away—but like yon everlasting mountains.'

CHAPTER III.

TARAAERE'S STORY.

One winter season the chief Ngaapaimarokura[1] (usually shortened into Apai) resolved upon an immense oven[2] of *ti* roots. In preparing it, he was assisted by his younger brother Rimanoa and the clan generally. A great hole was dug; the stones heated red-hot; the roots (four feet in length) arranged in the oven upon a layer of succulent leaves, to keep them from scorching, the whole covered in with abundance of leaves; finally earth and stones were piled on the top, to keep in the heat and steam. They had now to wait twenty-four hours ere the sweet roots would be ready. Apai desired his uncle Angene[3] to improve this spare time by

[1] 'Ngaapaimarokura' = 'Apai-(possessor)-of-two-girdles-of-red-and-yellow-parrakeet's-feathers;' articles of priceless value in those days.

[2] Ovens of *ti* were, and still are, made in the months of July and August, *i.e.*, the winter season, of each year. The *ti* root, when cooked, is full of saccharine matter; eaten with scraped cocoa-nut, it is delicious.

[3] 'Angene,' though an uncle, was a serf only—a privileged serf, however. Throughout the islands it was common for chiefs to marry slaves. The children inherited the status and property of their *fathers*.

catching a son of Kapo to eat with the *ti* roots, the parents having been disposed of on a former occasion. Accordingly the victim was brought to Apai, slain, singed, and cooked. When the ovens were opened, the whole clan received equal shares of *ti* root and the victim. The feasting over, the chief said to Angene, 'To-morrow you will fetch the rest of that family, as a relish for our intended oven of plantain roots.'

Early on the following morning the killing party started off for the two remaining lads and their sister. Someone had given them a hint; for they had run off in the night to another chief, Vakatini, for protection. They were kindly received and told to remain with him, although serfs to Apai. The reason for this was that they were nearly related to Vokatini's wife. But as the day wore on, they were desired to go to a neighbouring plantation belonging to their new master to get food. The young men were on their way back with their loads, when at a place called Puē they unhappily fell in with Apai and his armed party carrying in a long basket the body of a boy, partially concealed with leaves of the *Solanum oleraceum*.[1] This victim was intended as a substitute for the runaways. The delighted Apai said to his followers, 'Here are the *pigs*[2] we were in search of.' At this the young people cried out, 'Alas, we too shall be slain!' The cannibals surrounded and led on the victims to their own district

[1] A species of winter-cherry, called by the Hervey Islanders *poroiti*. The leaves as well as the bright red berries of this plant are eaten.

[2] A human being was never at Rarotonga called a *pig* unless intended for eating. To this day the direst offence you can offer to another is to call him a *pig*. It is always visited with a heavy penalty. This is the true Rarotongan curse.

Kiikii, and there prepared the oven. Rimanoa was about to club the eldest, when Apai stopped him, saying that it would spoil the eating. He was directed to strangle the poor fellow by pressing a stout stick on the throat, the arms and legs being held down by the clan. As soon as the body was ready for the oven, the brother was strangled and prepared. The stick was just upon the throat of the sister, a girl of seventeen or eighteen summers, when happily Vakatini (who had a misgiving that something was wrong) came upon them and snatched her out of their hands, saying, 'You have enough there already, I see. This is mine.' They attempted to coax him; but Vakatini was firm. Being well armed, and having a great reputation as a warrior, he succeeded in saving the girl. She henceforth lived in his family. Eventually she became the wife of Potikitana, the priest and friend of Vakatini.

Her original name was *Upoko* (=Head); but in commemoration of the tragical fate of her three brothers, she named herself One-oven (Umu-tai), the name by which she is generally known. Her unhappy brothers were Tipirangi, Kao, and Putoê. One day after this incident, Angene said to Apai, 'Will not all this be revenged upon your son Tukunaea some day?' The iron-hearted father promptly replied in words which at once became a proverb:—

Ta Tukunaea rapunga ake;
Kua aere Ngaapai.

It is for Tukunaea to look after himself,
When the warrier Apai is gone!

The aged deacon, Taraaere, wound up the story by saying, That woman[1] was my grandmother. 'Do you

[1] She died just before the landing of the first Christian teachers.

recollect her?' I inquired. 'How can I forget her, seeing that she brought me up?'

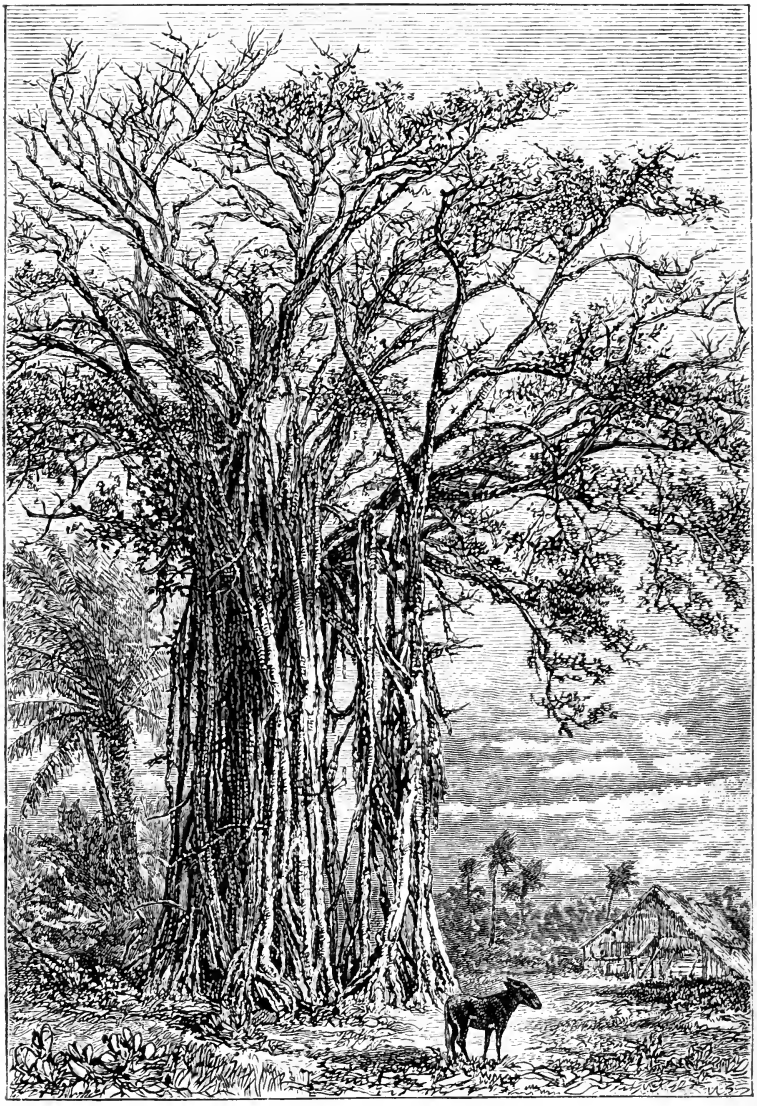
After hearing this painful narration from my old friend, I called upon Teakuo, the grandson of Apai, also a member of the Church here, to ascertain whether the story was correct. Teakuo said energetically to me, 'Every word is true; long ago would my family have been eaten by Taraaere's people in revenge, had not the Gospel of Jesus been brought to our shores.'

As Taraaere's family has long been possessed of great influence, I should say that but for Christianity not a descendant of Apai would now be alive. It must not be imagined that Vakatini was better than his neighbours. He too was an inveterate cannibal. The rule amongst these cannibal chiefs was, not to go outside the clan in selecting victims. Vakatini lived to see the introduction of Christianity to Rarotonga.

'The wolf also shall dwell with the lamb;
They shall not hurt nor destroy in all My holy mountain.'

PART III.

ZOOLOGICAL AND BOTANICAL NOTES.



BANYAN TREE.

Zoological and Botanical Notes.

SECTION I.

ZOOLOGICAL NOTES.

The Fur-Seal.—A native of Mangaia one day came running to me saying that Satan had just landed on the northern coast of the island. He was quite sure of it, for he had seen a black, shaggy creature rise out of the sea and land on the reef. I was much amused, and for a time could not make out what had really occurred. But another native fishing on the reef, who had some experience in the Arctic regions, happened also to see this marine animal, and recognised it as a fur-seal. Procuring a club, he contrived to get between the seal and the ocean, and succeeded in knocking it over. The flesh was eaten, and some caps made of the skin. The natives had no name for this mammal, proving that it had not previously been seen on the island. It is remarkable that this seal should have found its way from the Antarctic ice so far north as lat. 21° 57′ S. Commodore Byron, last century, brought home from Tinian Island, in the North Pacific, a fine skull of a sea-lion. An able writer on sea-lions, in the *Contemporary Review*,[1] says: 'Now, no seal or sea-lion has ever been so much as alluded to as existing

[1] December, 1875, p. 41.

at the Philippines or the Ladrones, which is, I think, strong evidence that none live there, for all the old voyagers used to touch at Guam, one of the latter group, and wherever they went they always mentioned the seals, if they found any, as they were useful to them in so many ways, as for food, leather, and oil. I imagine, therefore, that Byron must have brought this skull from the opposite coast, either from Patagonia, where his ship, the Wager, was wrecked, or from Juan Fernandez.' It seems to me that the incident I have referred to entirely removes the difficulty. I suppose that it would have been about as easy for a sea-lion to get to Tinian as for a stray seal to get to Mangaia, where its skull now lies. Another possible explanation is that the skull in question had been conveyed there by travelling natives. On the island of Tamana, one of the Gilbert group, I once saw the skull of a stranded sperm-whale worshipped with offerings of pandanus-nuts. The carcase had been devoured by the very men who made these propitiatory gifts.

Porpoises at Penrhyns.—On one occasion a vast shoal of porpoises appeared near the entrance to the lagoon. The boats went out, and in two days succeeded in capturing sixty, chiefly young ones. The islanders now gained courage, and resolved to attempt to drive the entire 'school' into their lagoon, which is nine miles in length. After chasing them backwards and forwards for two days and nights, they succeeded in inducing the herd to rush ashore close to the settlement. In all 360 porpoises were captured. Almost every man, woman, and child on the island had an entire porpoise. The flesh is good eating. Ever since they have been eating porpoise for breakfast, dinner

and supper. The entire village smells of these animals. Indeed, these hitherto half-starved islanders have grown sleek and contented. I know no more attractive sight than a 'school' of porpoises gambling in mid-ocean.

Disappearance of Land-birds.—The woods of Rarotonga, when I first knew the island some thirty-two years ago, were everywhere vocal with the song of birds. At that time 'taro' (*Caladium petiolatum*) was very abundant, and though not equal to that of some other islands, was one of the main supports of human life. At the present time it is almost vain to cultivate the taro plantations, on account of innumerable caterpillars which destroy the leaves of the young plants. The natives are puzzled to account for this. The reason, however, is obvious; whilst the gun has done much mischief in the hands of wanton lads, the cat has considerably more to answer for. The cat, introduced by missionaries, early emigrated to the bush, and for a time was a real blessing by keeping down the small indigenous rat which then overran the island. Rats becoming scarce, the cat took to hunting birds. The result here, and in many other islands, was that several species of birds were soon exterminated; others are now rarely seen, having taken refuge in the almost inaccessible rocks of the interior. I have more than once ridden round the island without hearing the cry of any but sea-birds. The stillness of the forest would be intolerable but for the pleasing hum of insects as the sun declines.

Another cause of the disappearance of land-birds in these islands is worth mentioning—cyclones. Some years ago, for three successive seasons, cyclones desolated some of the islands of this group. Conse-

quently the 'kakirori,' two species of which were once common, especially in the neighbourhood of the sea, was (it was believed) exterminated. A few days ago, however, a living 'kakirori' was brought to me from the interior, and excited a good deal of interest amongst the natives. This bird is larger than a sparrow, has bright brown plumage, and feeds exclusively upon caterpillars. In a few years the land-birds of many of these islands will be extinct.

Turtle at Rakaanga.—Several species of turtle—Loggerhead, Hawksbill, Green Turtle, &c.—are very plentiful on Rakaanga in the breeding season. All turtle were formerly sacred, being eaten only by kings and priests. It is quite otherwise now (except at Rarotonga, &c.).

Solitary turtle sleeping on the surface of the ocean are occasionally caught by the hand; but the turtlers are apt to get severe bites from the powerful jaws of the reptile. All kinds are gladly eaten; the 'tortoise-shell' obtained from the Hawksbill is carefully removed for sale. The pairing season is from September to October. They are easily caught at such times. If seen near the reef, six or eight natives swim off with two lines. On approaching the turtle, one of them dives underneath and violently strikes the plastron, in order to prevent the reptile from diving to the bottom. In its surprise and alarm, the fore and hind limbs are well secured with a rope, the animal turned over, and dragged ashore in triumph.

The female comes ashore on a fine, calm, moonlight night to lay her eggs. She is careful to select an unfrequented spot, covered with low bushes, and then with her hind flappers proceeds to scoop out a hole,

two feet deep, in the sand. When this is accomplished to her satisfaction, standing at the edge of the hole on three feet, she drops her eggs one by one on the remaining hind flapper, which, used as a hand, carefully deposits them in the nest. As many as 150 or 200 eggs are laid at one time; that is, half the supply with which Nature favours her. The number of eggs varies according to the size and age of the turtle. The eggs are now covered with sand, which she beats down with her fore flappers. To conceal the place more effectually, she breaks off branches of plants, and strews them about. Finally, she returns to the ocean by a different route. The entire operation does not exceed an hour. Turtle are most easily caught when laying their eggs; hence the natives are always on the look-out on moonlight nights in September and October. On these occasions turtle crawl ashore slowly and awkwardly, but return to the ocean with great speed, and with a grand sweep of their flappers.[1]

If she perceives that she has been noticed when on her way to deposit her eggs, she will endeavour to hide herself by covering herself with sand.

On the tenth night afterwards, she comes ashore again to deposit her second set of eggs; selecting, however, a different spot. The number of eggs is the same as before. The same hind flapper is used on this occasion for depositing them in the nest. The last egg is easily distinguishable, being very small. Turtle eggs are white, perfectly round, and

[1] Turtle *invariably* prefer low coral islands; probably because they are excessively hot and dry. Natives assert that 'the shadows thrown over the reef by the lofty mountains of islands like Raratonga alarm turtle.'

covered with a thick membrane only. They are much relished as food. It is remarkable, however, that when boiled, the 'white,' *i.e.*, the albumen, does not become firm. The total number of eggs laid in the season by a single turtle varies from 300 to 400. Each egg when full grown is one inch and three-quarters in diameter. When fried the flesh of turtle tastes somewhat like beef-steak; it also roasts well. Perhaps the most delicious portion is the flappers, cut up small and stewed.

A practised eye is required to detect a nest of turtle eggs. A stick is used to pierce the sand; if it descends easily, the sand has been disturbed by a turtle, and a great prize is secured! Natives of these atolls often bury a number of turtle eggs again inside their own dwellings, or along the public road, in the hot sand. In about three weeks they are hatched. The little creatures at once scratch their way to the surface, and (if left to themselves) hurry instinctively towards the sea—their true home. Pet turtle are kept in tubs when small, and afterwards transferred to enclosures on the reef, until they are required for eating. They are fed on sea-weed and clam.

In their natural state, young turtle have many foes. Birds pounce down upon them. Fish swallow them greedily. Some are gobbled up by larger turtle. Out of the vast numbers hatched, few attain maturity. Despite the solicitude evinced by the mother-turtle about the safety of her eggs, she never tends her young. Hence the ancient Rarotongan proverb in reference to neglected or forsaken children,—'offspring of the turtle!' (anau a onu). This taunt is bitterly felt.

The largest turtle sometimes fall a prey to sharks. One evening a dead turtle weighing 350 lbs. was

snatched from a shark off this village. Its blood was still warm.

Turtle feed on algæ, crustaceans, molluscs, and fishes. Some of them are so large as to require, when caught, four strong men to carry one. Loggerhead turtle are smaller than some others, but are the fiercest of all. For many months we had a small pet turtle. It was voracious and almost omnivorous, greedily devouring bits of raw pork and fowl, bread, or anything to hand.

In the comparatively shallow waters of the lagoon at Aitutaki, turtle are chased by the natives in canoes until they are exhausted, and fall an easy prey. No spear or line is used on such occasions. Not long since, a native of Aitutaki, diving for turtle, imagined that he had obtained a prize; alas! it proved to be the dead body of his son, who had unwisely gone turtling *alone* early in the day.

The Sting Ray.—This dreaded fish, of which there are several species, is extremely common in the Pacific. It rarely exceeds twelve feet in length. It loves to bury itself in a slight elevation of sand, the eyes and forehead alone visible, and the whip-like tail appearing as a stick in the distance. By-and-by an unwary fish glides along, and is instantly covered and devoured by the sting ray. If its hunger is not satisfied, it will again and again hide, with similar results. Natives sometimes have the mishap to tread upon the buried fish. In an instant the offender is lassoed, and the serrated spine of the tail driven into the flesh. The point of this terrible weapon is sure to snap off; if in the body, there is no hope for life; if in the leg or foot, it is best cut out from the opposite

side, as it is impossible to pull it out. The spine is not poisonous. In each sting ray there are two *oto*, or long bony spines, the second lying below the first. It frequently happens that the new spine has arrived at a considerable size before the old one has been cast.

At Penrhyns and many other low coral islands, spears were until lately pointed with the sharp, barbed spine of the sting ray, loosely inserted, so that on withdrawing the shaft the spine might work its way into the vitals and occasion death.

At certain seasons they have a curious habit of herding together, or rather of crowding themselves one upon another. This is called an 'oponga fai.' The joyful fisherman, leaving to his companions the care of the boat, dives down behind these rays, and with a strong cord cautiously secures one or two of the bottom tier by the tail. The captives are gently pulled up into the boat, so as not to alarm the rest. This process is repeated until perhaps a dozen or fifteen have been obtained, when the rest becoming alarmed rush off. A half-caste fisherman threw a heavy charge of dynamite into one of these herds and killed eighty at once.

The most trustworthy natives assert that this fish has the power of shooting with one of its spines when attacked. I am informed that at Manihiki a great sting ray, sunning itself on the surface of the water, was greatly angered by the fall on its back of some cocoa-nut, fronds and nuts, from a tall overhanging tree. In its rage it discharged an *oto* at the supposed foe and struck a nut. A spine of another sting ray was discovered sticking in the corner of the teacher's house at Taunu. It was extracted, and sold to a

trader. A man was in this way shot through the thigh; but as the *oto* passed out, the wound with careful treatment soon healed. Hence the warning, always on the lips of fishermen, Beware of the dart! (Kia matakite i te oto.)

At Samoa it was formerly Malietoa's privilege to rid himself of his foes by means of this formidable spine. A spine would be split into three parts with a knife. Each splinter was called an 'aitu tangata' = 'a human god,' the gods being the arbiters of human destiny. In this case the supreme chief Malietoa was supposed to act as their deputy. Should a splinter get into the body, it would work its way inward as the man breathes like a needle; upon reaching a vital part, death would ensue. The *modus operandi* was as follows: a trusty dependant was sent to fix the splintered spine upright in or under (in the dried grass) the sleeping mat of the victim, so that in turning over in sleep it would be sure to enter the person and do its deadly work.

A chief of singular courage, although thus pierced, without uttering a word to those about him, seized his club and tracked the murderers, who were paddling homewards with much self-gratulation. The doomed chief hurried along the beach, ever keeping their canoe in sight. At a certain point the assassins landed for refreshment, leaving their weapons in the canoe, utterly unconscious of danger. The light of the moon being very indistinct, their victim met them as they stepped ashore and, in accordance with native etiquette, politely asked them where they had been, and for what purpose. The men, not recognizing the disguised voice of their victim, just told the truth. The wounded

chief clubbed them both, went home to inform his family of what had transpired, and in a few days died, it being impossible to extract the 'aitu tangata,' death being hastened by his great effort to secure revenge.

A visitor of consequence had retired to rest one pitch dark night, when the screen of cocoa-nut leaves was removed from outside for the purpose of fixing a splintered *oto* in his mat. Happily he was awake, and instantly gave the alarm. At this his attendants, rightly divining the purport of the intrusion, rushed after the offenders, who by crouching down close to the house, contrived to elude detection and death. According to the wont of such assassins, their heads were shaved and persons anointed.

The sting ray is a universal article of diet in the Pacific. The flesh is remarkable for the redness of its colour. In the Hervey group this fish is, on account of its shape, called 'the bird-like' (Tāmanu). It is usually speared from before or on one side. A native of this village, named Araiti, approaching from behind in his canoe, was struck in the stomach by the *oto*, or sharp-pointed spine, and died. His descendants are known as 'the children of Araiti of the sting ray.' A sting ray was lately caught in a net by the students; a spine was found stuck in one of the floats of the seine. It is asserted that an *oto* has been found sticking in the stem of a pandanus growing near the water's edge.

The poisonous 'No'u' fish of the Pacific.—The appearance of this fish is so very repulsive that once seen it is not likely to be forgotten. The head and mouth seem to be altogether out of proportion to the

size of the body. In colour it is very dark, mottled with yellow and red. The skin is loose and wrinkled, strongly reminding one of elephantiasis in its worst form. Long poisonous spines that run along the back—indeed, all over the upper part of the body, especially the head—form a perfect *chevaux de frise* of defence against all foes, as every point is charged with venom. The poison[1] is contained in little bags at the root of the spines. There are several varieties of 'no'u,' but they are all justly dreaded.

A specimen lying before me is 10 inches by 3. The 'no'u' rarely exceeds 15 inches in length, yet it is the terror of native fishermen in shallow waters. Sometimes it will lie on a patch of purple coral, and seem, even to the most acute observer, to be a part of it. The illusion is made complete by the head and back of the full-grown 'no'u' being generally covered with seaweed. The slightest prick of the hand feeling about for shell-fish, or of the unshod foot of the fishermen as he follows his net, occasions the most exquisite pain. The 'no'u' loves to bury itself entirely in the sand, its eyes only being uncovered, and the sharp, slender spines on the back scarcely visible. As soon as a small fish is within reach it pounces upon its victim, scarcely ever missing it. It is often caught with the hook. The custom is to seize

[1] In reference to the 'no'u,' Dr. Gunther writes :—'In *Synanceia* the poison-organ is still more developed; each dorsal spine is in its terminal half provided with a deep groove on each side, at the lower end of which lies a pear-shaped bag containing the milky poison; it is prolonged into a membranous duct lying in the groove of the spine and open at its point.' For 'milky' I should substitute yellow.

it by the *lower* jaw, the only part that may be handled with impunity.

Three natives of Aitutaki have, within my own memory, died through accidentally treading upon the 'no'u,' despite every effort to neutralise the poison. The entire weight of the body being thrown upon the spines, the poison was conveyed where the antidote could not possibly reach. A sad case lately came under my notice. A girl, after scattering fish-poison, put her hand into a fissure of the coral, where certain fish are accustomed to hide. Unfortunately, she grasped a 'no'u.' Aware of her peril, she went straight home for help. The whole arm swelled frightfully, and the pain soon extended down to the feet on the right side. Next day the pain and swelling had affected the left side. Despite all my efforts to save her, she died of tetanus thirty hours after the accident occurred. Occasionally natives are poisoned by incautiously treading upon the spines thrown into the bush after a meal.

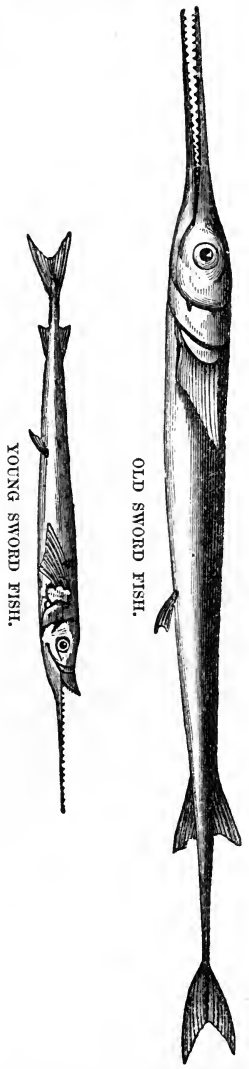
Several native remedies are useful. The best I am acquainted with is the following:—The leaves and vine of the pohue (*Convolvulus Brasiliensis*), pounded with the leaves of the miro (*Thespesia populnea*), and heated over a fire. A student of mine, poisoned by the 'no'u,' to whom my European medicines failed to give relief, was, in my presence, almost instantaneously cured by the above application.

Strangely enough, if the poisonous spines and skin are carefully removed, the flesh of the 'no'u' is excellent eating.

This dangerous fish is common throughout the Pacific and Indian Oceans; our teachers eat it on the

shores of New Guinea. At Samoa it is known as the 'nofu;' at Tahiti, the 'Nohu.' The *Synanceia verrucosa* of scientists is a species of 'no'u.'

The Sword-fish.—The sword-fish of the Pacific (*Xiphias gladius*) spawns about the end of September. With the new year the young fish arrive in considerable numbers at all parts of the island. The fish, there known as 'miro-miro,' is not more than three inches in its entire length, the sword itself being an inch long. The natives are very fond of these young fish. When cooked they carefully break off the swords, and swallow three or four fish at a mouthful.



The young fish return to the ocean to hunt the spawn of other fish, which often seem to cover the sea in the months of January and February. By the following year it has attained the length of ten or twelve inches, and is then called a 'miro.'

As in the former season, the lower jaw only is developed into a sword, the upper one remaining quite short. The body is round and plump; the back of a light blue colour; the belly a silvery white. The tail

resembles a steering oar, and possesses wonderful propelling energy. All Europeans who have tasted the young sword-fish pronounce it delicious eating, its numerous little bones being the only drawback.

By the third season this famous fish attains the length of nearly two feet, and now for the first time receives the dignified name of 'aku,' or 'sword-fish.' The blue colour of the back and head is much deeper; the head is flattened; and the shape of the tail is somewhat altered. The upper and lower jaw are now of equal length, thus determining the application of the name 'aku,' or 'sword-fish.'

It is rare to meet with one of these young fish which has not injured its sword. But, like the nails of the human body, it is being continually renewed, and grows harder each year of its existence.

The perfect sword-fish returns no more to this reef, fearful of being caught in its shallow waters. It amuses itself outside by chasing small fish.

The sword-fish is believed to attain to a great age. The terrible weapons which pierce ships and kill whales are necessarily the growth of many years.

Young sword-fish are easily caught in strong nets. The largest obtained in these islands does not exceed six feet in length. Such *Xiphiæ* despise the strongest nets, but are occasionally caught in the daytime with a hook baited with a small black fish. It not unfrequently happens that in chasing flying-fish at night the course of the sword-fish is arrested by the stout outrigger of a canoe, and whilst struggling to extricate itself is easily made a prisoner.

One day a deacon of the church came upon a pair of sword-fish over six feet in length. As they lay still,

close to his canoe, he observed what I regard as a most singular circumstance—that both male and female had lost their swords, the stumps only remaining.

The sword-fish, when fully grown, attains the length of ten or twelve feet, and is the terror of fishermen in these Southern seas. There is no authentic account of such a one having been caught here. Numerous accidents resulting from the half-grown sword-fish have come under my own observation. In one case a wrist was pierced through; the wound was of course circular. The assailant speedily withdrew its weapon, and went on its way uninjured.

Late one evening a native came running in haste for some arnica for a young man who had been carried ashore wounded by a large sword-fish. A *Xiphias* in hot pursuit of some flying-fish had struck the large canoe in which the young man was seated. Both sides of the canoe were perforated; the knee happening to be in the way, was pierced just above the joint. The sword could not have been less than two feet in length. For some seconds the poor fellow was stupefied with terror and loss of blood. He limps to this day. In two other cases the thigh was stabbed obliquely, nearly dividing the femoral artery. Eventually both the injured persons recovered.

The worst casualty was that of a youth whose hip was severely injured by this formidable fish. The lad narrowly escaped with his life; but after several months' nursing the ghastly wound healed.

A few weeks ago a friend of mine witnessed an interesting combat from the deck of a small schooner. The day was sultry, and the ocean like a mirror, when a number of albicore neared the little vessel. At this

a sword-fish, some nine feet in length, darted from its hiding-place under the vessel; the albicore, however, escaped. The disappointed sword-fish returned under the vessel to hide until the albicore should forget their fears and return. Again and again, for half a day, this process was repeated; the quick-witted albicore at each onset evading their foe. At midday a light breeze sprang up, and the combatants were left behind.

Fish-poisoning at Rarotonga.—One day a number of drummers perambulated the village, with an announcement, in the name of the chief, 'To-morrow everybody is expected to collect and grate fish-poison; on the day following a grand fishing expedition will come off at Nikao,' a favourite-fishing ground about two miles from the village.

At that place about sixty acres of reef are enclosed with great blocks of coral, so as to shut in the fish at low tide. Nikao is much frequented by fine grey-mullet. To make sure of being there in good time, many families from the more distant villages went overnight, sleeping on the white sand, sheltered by iron-wood trees growing to the water's edge. Each person had a small basket of fish-poison, consisting of the grated nut of the *Barringtonia speciosa*. At dawn the representative of Makea entered the water, lustily calling to the people to follow and scatter the poison. Each man was armed with a three-pronged fish-spear, or with a rough sword extemporised out of a piece of hoop-iron. The smaller fish soon die and float on the surface, and are gathered into baskets by women and children; but the larger fish, such as mullet, becoming only partly stupefied, and consequently somewhat slow in their movements, are easily struck or caught in nets.

It was about 9 A.M. when I made my appearance amongst them. It was a pretty sight—many hundreds of natives chasing and spearing mullet and other fine fish. Twenty-five large fish were presented to me. All along the margin of the sea, squatting in the shade of slender, graceful iron-wood trees, were various little groups, busy cooking and eating part of the spoil. The occasion of this hurried breakfast was the harmless superstition that it is unlucky for any one to eat or smoke before the poison has taken effect. As soon, therefore, as a good number of fish are captured, they hasten ashore to broil some, and when the pressing claims of hunger are satisfied, they go back to their sport.

At 11 A.M. the tide came rolling in over the outer edge of the reef, and the fun was over. A picturesque cavalcade of men, women, and children wended their way homeward, through a narrow road, over-arched with mimosas, screw-pines, palms, and the never-failing lemon hibiscus. Each person carried a basket of fish. The satisfied expression of face, and the merry ringing laugh, were sufficient to prove that they were unusually pleased. Often great variety of grotesque costume and equipment met the eye.

Some two thousand grey mullet, besides other fish, were caught that day. When I reached home I weighed a mullet that fell to my share. It proved to be four pounds. It is said that larger specimens are occasionally caught.

Another fish obtained in large quantities is the *nanue*. It is capital eating. A yellow variety of *nanue* is sometimes met with. The natives assert that if one of them enters a seine the rest, *i.e.*, the ordinary

sort, are sure to follow. Hence the playful name given by the natives to that fish, 'The king of the *nanue*.' If two yellow *nanue* are obtained, the custom is to put back one into the sea. One of these 'kings' was given to me that day.

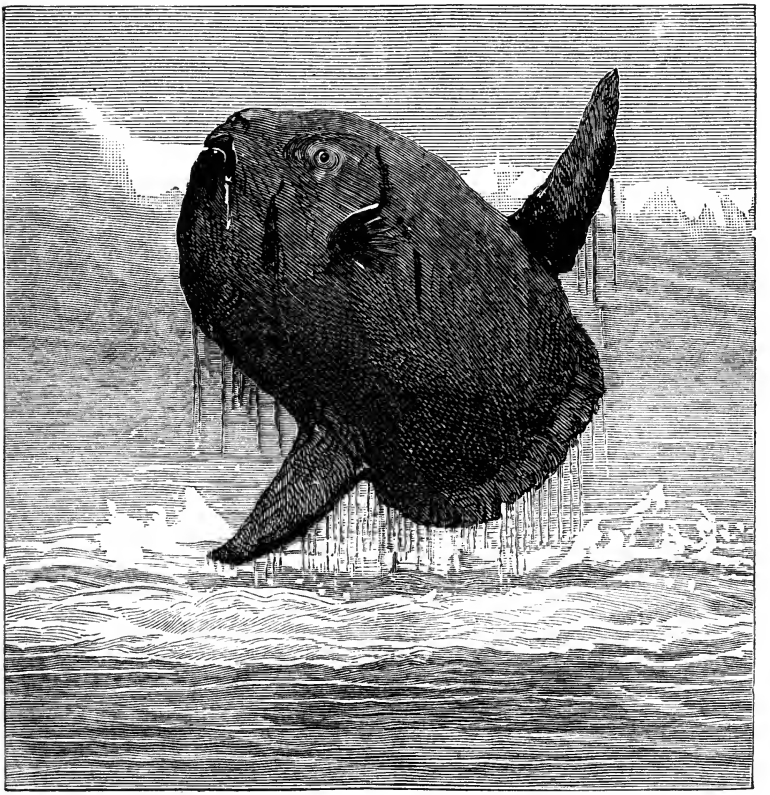
Whilst the juice of the nut of the *Barringtonia speciosa* is deadly to human beings, it does not in the least degree render the fish unwholesome. On this island, since the introduction of Christianity, three persons have been poisoned by purposely mixing some of the grated nut with a cooked preparation of cocoa-nut. On Mangaia it was usual to disguise this poison in a bowl of intoxicating 'kava' (*Piper mythisticum*).

A small plant, *Tephrosia piscatoria*, called 'mata-ora,' with white flowers, growing on the hillsides, is also used as a fish-poison, but on a much smaller scale. Leaves, stem, roots, flowers, and seeds, being all poisonous, are pounded, and put into the sea. But the most deadly vegetable poison known in the Hervey group is the 'reva,' *Cerbera lactaria*, a stately tree bearing cream-white flowers, much like those of the *Gardenia*. Every part of this tree yields a most virulent poison, never used for killing fish, as the fish would become poisonous. This was the dreaded instrument of death used by sorcerers in the olden time.

Fish-poisoning expeditions take place some three or four times in the course of the year, but, of course, at different parts of the island. It is, however, no uncommon thing to see the whole crowd return without a fish, the wind having become adverse. This method of fishing is practised throughout the Pacific.

The Sun-fish (*Orthagoriscus*).—On a lovely tropical

morning in the South Pacific, when sailing between Danger and Suwarrow Islands, we heard the captain shout, 'A sun-fish!' I rushed on deck. There indeed was the huge fish sunning himself on the surface of



THE SUN-FISH.

the water, scarcely moving a fin. Its appearance is very remarkable. Its short, round body seemed as if the hinder part had been bitten off. The mouth was small in proportion to the size of its body, and the

tail very short. It was of enormous size, probably weighing six hundred pounds. Yet it will leap clean out of the water when struck with a bullet. The sun-fish of the South Pacific certainly differs from that occasionally seen on the coasts of Britain and commonly figured in books. It was about eight feet long by six feet wide. After some time our visitor swam leisurely away and a shark took its place.

By the Hervey Islanders the sun-fish is called 'vavarua.' It is common in the Paumotu Islands and some other parts of the Pacific. It feeds on sea-weed and a species of mackerel called by them 'koperu.' It is said to hunt in company with the shark, always keeping in advance. It is, however, never molested by the shark, its skin being nearly two inches thick, tough and elastic. Its flesh is not much eaten by the natives, as they believe that it occasions a skin disease.

The Kraken, or Gigantic Octopus.—It is curious that the ancient Scandinavian myth of a monstrous octopus, which attacks and destroys passing ships, is repeated at the other side of the globe. The natives of Aitutaki, in the Hervey group, have a legend of a famous explorer, named Rata, who built a double canoe, decked and rigged it, and then started off in search of adventures. At the prow was stationed the dauntless Nganaoa, armed with a long spear, ready to slay all monsters.

One day, when speeding pleasantly over the ocean, the voice of the ever-vigilant Nganaoa was heard: 'O Rata! yonder is a terrible enemy starting up from ocean depths.' It proved to be an octopus of extraordinary dimensions. Its huge tentacula encircled

the vessel in their embrace, threatening them with instant destruction. At this critical moment Nganaoa seized his spear and fearlessly drove it through the head of the octopus. The tentacula now slowly relaxed, and the dead monster floated off on the surface of the ocean.

Terrestrial Mollusca of the Hervey Islands.—My friend, Mr. A. Garrett, *the* authority on this subject, says :—

When we take into consideration the small size of the islands, we are astonished at the number of species and profusion of individuals scattered over such small areas.

Excepting the two *Partula* and *Melampi*, all the species are of minute size.

Rarotonga has so far yielded thirty-nine species, twenty-one of which are peculiar.

Aitutaki has produced twenty-eight species, ten of which do not occur elsewhere.

Atiu has twenty species, two only of which are peculiar.

Out of the nineteen species found on Mangaia, one only is confined to that island. The *Partula*, which does not occur on the other islands of the group, is common to Tahiti and the Austral Islands.

Of the fifty-four known species, thirty are peculiar to the group, and twenty-four are more or less widely diffused throughout the other Polynesian Islands.

Query : How was the migration effected? Not, I think, by human agency; but in some remote period when land communication existed.

Fishing at Penrhyns Island.—The natives of this island are noted fishermen, and have the reputation of

being almost amphibious. As for some years past their cocoa-nut palms have scarcely borne any fruit, the islanders are chiefly dependent upon the wealth of the ocean. A lagoon, nine miles long, with a ship-passage through it, is filled with pearl oysters (*Margarifera*, Linn.), and tropical fish of all kinds, from the tiny minnow to the huge 'maramea.' Outside the reef, in the blue Pacific, the porpoise and the sperm-whale disport themselves.

In October turtle come ashore to deposit their numerous eggs in the hot sandy beach of the less-frequented islets which enclose the lagoon. They are occasionally surprised and turned over while thus engaged. The common method of catching turtle at Penrhyns is on this wise: When there is not a breath of wind stirring, and the ocean presents a glassy surface, the islanders start off in their boats and canoes at daybreak. In single file they slowly make their way to sea, eagerly straining their eyes to sight a turtle on the coral bottom. By-and-by a shout is raised, 'There goes a turtle' (*Tena te onu*). Boats and canoes now speedily form a circle over their intended victim, the natives rapping hard their canoes and boats, in order, as they aver, to bewilder the turtle. When their object is supposed to be attained, a man, with a rope under his armpits, dives to the bottom to surprise the turtle. Several others now follow, to surround their prey and to render assistance to the first man, whose special duty it is to lay hold of the flappers of the enormous creature and to struggle up with it to the surface, diver and turtle being hauled up together. Sometimes his companions below, to aid the turtler, catch hold of the hair of his head, and so

drag him up.[1] Two or three turtles make a good day's sport.

The 'sacred fish' of these islanders in the olden time were the robber-crab (*Birgus latro*), a species of land crab called the 'tupa,' the octopus, and the conger-eel. Turtles and porpoises were eaten only by men. The superstition of those days was that if a woman ate of the porpoise, her children would have porpoise faces!

Shoals of porpoises are occasionally driven ashore by the Penrhyn islanders; they think it poor fun if the result is less than four or five porpoises apiece. When a shoal comes in sight, as many boats and canoes as they can muster, each carrying large stones, go right out to sea to cut off their retreat. The porpoises are easily driven towards shore by the sight of approaching boats and the shouts of excited natives. On nearing the reef, some of the big stones are dropped into the

[1] This may seem incredible. In 1872 I spent a day at Nukunau, one of the Gilbert Islands. Crowds of savages came off to us in boats made by themselves of thin planks beautifully *sewn* together with sinnet. One boat overtook and sailed round the John Williams when going at the rate of six knots. The islanders came to see the white strangers and to dispose of helmets of porcupine fish, complete suits of armour of cocoa-nut fibre, and swords of hard wood with formidable rows of sharks' teeth running the entire length. The order that no woman should be allowed on deck was observed for a while, until a woman, enraged at the non-disposal of her curios, called out to a countryman who was leaning over the bulwarks, and was at once pulled up by him on deck by the hair of her head! Her companion was afterwards being pulled up in the same fashion, when her hair proved too short for the man to retain his hold, and she fell plump into the boat. It was evident that they were none the worse, for they laughed heartily. There can be no question that civilisation increases sensitiveness to pain.

sea to add to their alarm. Again and again great stones are dropped. When close in, numbers of natives dive down among them, until, in sheer terror, they rush through the boiling surf on the reef, and are at once despatched by those ashore.

A curious method of fishing is practised by these fearless islanders. A canoe is paddled outside the reef and anchored with a stone; a hook is then fastened to a line about the length of a man's arm, and duly baited with a piece of fish. Another piece of fish is chewed until it is quite soft, and is retained in the mouth. The fisherman now dives to a great depth, and upon seeing a fine fish throws out the masticated bait along with the baited hook. As soon as the fish is caught it is killed by a bite on its neck, and the fisherman comes up at once to deposit it in his canoe. Again and again this process is repeated, until the fisherman is satisfied with his success. It is surprising how many they will catch in this way in a very short time. Sometimes you may see a couple of natives half a mile from shore provided only with a plank, on which they keep their bait, and to which they secure the fish they may catch with sinnet. Indeed, the Penrhyn Islanders seem almost as much at home in the sea as on land.

Sharks are, of course, very numerous. During the early phases,[1] of the moon in April, young fish arrive in great quantities, the ocean being seemingly alive with them. The first intimation of their arrival is the unwonted number of sea-birds flying low and gorging themselves. At such times the islanders easily approach the sharks as they swim about on the surface feasting themselves; they contrive adroitly to drop here and

[1] Each phase has a distinct name; there are thirty to each moon.

there a running noose over the tail, and then suddenly haul them into their boats. At other times, like the Aitutakians and some other islanders, they dive down several fathoms, enter the caverns in the reef where they rest, and passing a rope with a slip-knot round the tail, hastily rise to the surface and haul up their prey.

Many narrow escapes occur. Some years ago, Tutoa and Anure one evening crossed the lagoon to an islet to fish. After a good night's rest at, say, 4 A.M. (having no canoe), they swam out to sea with their fishing gear, and fished so successfully that by 6 A.M. they were ready to return to shore. Their spoil was, according to their custom, strung together with the midrib of the cocoa-nut frond, and secured to a float six feet in length. After swimming a little way, they observed a large shark following them. They hurriedly tore off with their teeth some of the fish and threw them to the foe. Again they struck out for shore, but on looking back found that the hungry shark, after swallowing the mouthful thrown to him, was still on their track. Other fish were now torn off and thrown to the monster. Again they swam for dear life, but found themselves still chased by the shark. More fish were thrown to him and devoured. Again they pressed on for shore, hoping this time to gain it, but the shark was too quick for them. As a last resource, they threw to their relentless foe the remainder of their fish, with the float to which they were firmly secured. On, on they swam for the reef. How terribly anxious those moments! Somewhat delayed by repeated efforts to tear off the fish from the plank, the shark resumed his chase after the terrified swimmers. But by the

good hand of God, their feet touched the reef ere the foe could get sufficiently near to turn on his back for the fatal bite. Tutoa and Anure believe that their preservation was in answer to agonising mental prayer.

The native superstition is that sharks will not attack human beings unless they have quarrelled, or in some other way offended.

A species of *muræna* on Penrhyns goes ashore occasionally in pursuit of fish that in their terror have leaped on the shingle. Another sort moves over the coral, half out of water, erect on its tail! Hence its Rarotonga name *tu-ua*, *i.e.*, 'the erect.'

White traders supply the Penrhyn Islanders with imported cocoa-nuts, arrow-root, rice, and buscuit, in exchange for pearl shell, at the rate of ten shells for a dollar. A few years ago eighty shells were given for a dollar, but shells are growing scarce. The pearl oyster-beds ought to be left alone for five years; but hunger is imperious. But why hungry amid such abundance of fish? It is found to be impossible to sustain life for any lengthened period on fish diet alone. Vegetable food of some sort or other is absolutely necessary. Year by year the natives dive deeper and deeper, without weights or artificial aids of any kind. Eighty feet is no uncommon depth for a pearl-diver on Penrhyns. Not a year passes but we hear of divers who never return—either exhausted and drowned by the weight of shell and the tremendous pressure of water upon them, or (as seems most probable) snapped up by hungry sharks.

Valuable black as well as white pearls are obtained occasionally on this low coral island, which is only

about ten feet above the level of the surrounding ocean.

Clams and Clam-diving.—Landing on a true coral island almost under the equator, on an extremely hot day, I was kindly invited to bathe inside the native pastor's cottage. The flooring throughout was of snow-white pebbles, *i.e.*, pieces of coral ground smooth by the action of the ocean. In the inner room, instead of a tub, was the lower valve of an immense oval clam. The entire shell, with the mollusc, must have weighed some hundreds of pounds. This giant clam (*Tridacna gigas*), originally obtained by an English vessel in Torres Straits, was conveyed to the Line Islands whilst the inhabitants were heathen. As a clam of that size had never before been seen there, it was at once installed by the priests as a new marine divinity. Upon the triumph of Christianity the degraded god was presented to the preacher of the new faith.

There are about fifty species of clams, all natives of the warmer and tropical seas, and especially common among the coral reefs. They greatly vary in colour, shape, and size. The bear's paw clam is perhaps the most beautiful. The thorny clam, with its branching horns, is a curious object. The purple[1] clam, by far the most plentiful in the Pacific, is very pretty as you peer down upon the wonders spread out at the bottom of a lagoon. The water clam is so named on account of its valves invariably containing a small quantity of sea-water. A fine specimen of this remarkable clam, weighing 25 lb., is lying before me. The internal edges of the shell are tastefully adorned with a stripe of deep yellow, and are but slightly indented. The

[1] Purple when fully grown, but of a straw-yellow when young.

water clam and the giant clam are designated by the natives *paūa toka*, or stone clams, to distinguish them from true clams, which simply bear the name of *paūa*.

The shell of these molluscs consists of two unequal valves. There are two hinge-teeth in one valve and one in the other. The edges are greatly indented and interlock, to correspond with the overlapping foliation of the surface.

Clams, like oysters, are eaten raw or cooked. Indeed, the natives of the Pacific are very partial to this diet. In most of the true coral islands these creatures are cut into strips and dried in the sun. Baskets of dried clams are sent by the natives as valuable gifts to friends on distant islands.

The specimens found in the shallow waters of fringing reefs are small; the larger ones abound in the shelving seaward sides of fringing reefs, or in the deep and almost motionless waters of the lagoons. From a cavity at the base of the mollusc springs a white byssus, which expands into a sort of disc at the point of attachment, so as to have a firm hold of the coral rock. The clam usually selects a convenient hollow, sufficiently wide to permit it to rock gently backwards and forwards with the current (if any), to serve as a protection to the byssus, by which it is securely moored.[1] The base of the water clam forms part of the coral rock, and can only be detached from it by a heavy blow.

Clams, like pearl oysters, grow in beds. They lie,

[1] Sometimes the growth of coral on the sides prevents the valves from opening fully. In that case the clam is eventually walled up alive by the surrounding coral.

frequently half-buried in sand or coral, with their valves a-gape, ready to snap up whatever may unwarily enter. In diving for pearl oysters at great depths, it is needful to trust a good deal to the fingers. It thus occasionally happens that the diver, instead of getting hold of a pearl oyster, unwittingly inserts his hand between the valves of a clam. These valves immediately close with irresistible force. If the animal be large, the fingers are snapped clean off; if small, the unlucky diver may rise to the surface in great pain, with a living clam dangling from his fingers.

In diving for clams, as in octopus diving, it is usual to provide oneself with a sharp-pointed stake or an iron rod. At Aitutaki, when the tide is out, clams are picked up everywhere on the reef. At Mauke men dive for them on the ocean side of the narrow fringing reef when the sea is smooth. On reaching the bottom, the diver stabs the gaping clam, which—for the mollusc is very tenacious of life—at once firmly grasps the weapon. The diver now tugs away with both hands until the clam is dislodged. A couple of expert natives with a canoe will get as many as a hundred in a day when a feast is in preparation.

At Manihiki and Rakaanga the largest clams are about two spans in length, the animal itself being sufficiently large to satisfy the hunger of three persons. Clam-diving is woman's work in those *atolls*. Yet it is surprising how few accidents occur. The reason for this may be, that they dive in comparatively shallow water.

On one occasion a native was feeling about at the bottom of the lagoon of one of the Paumotu *atolls* for the dark-edged pearl oyster, when he unfortunately

inserted the fingers of his left hand between the valves of a clam. The diver was instantly made prisoner by the mollusc. His agony was intense. Was it possible to get free? As the clam was in a hollow just adapted to its size, he could not sever the byssus. At length, in sheer terror of drowning, he cut off his four fingers with the knife pearl-divers carry with them, and rose to the surface a sadder, if not a wiser man.

A similar accident took place at Penrhyns; but the diver, instead of maiming himself for life, forced his knife between the valves, and released himself. Should the clam be attached to a smooth bit of coral, the speediest mode of rescue is to sever the bundle of silky filaments by which it moors itself. On a neighbouring island, ere this could be done, the forefinger of the right hand of a clam-diver was lopped off.

Brought ashore in baskets, they live for some time. Children in their play are apt to put their fingers between the open valves, and so get caught. Their screams soon bring their parents to the rescue, which is effected by stabbing the clam through the cavity for the byssus.

The supply of clams in the Pacific is inexhaustible. If a party of divers should remove all the large ones from any particular locality for a grand feast, and should return next year to the same spot, no difference would be perceived, so rapid is the growth of the clam in these warm waters.

Pearls of a peculiarly brilliant hue are occasionally found in the clam. A jeweller of Sydney offered in vain £25 to a trader for a very lustrous one about the size of a pea. A friend of mine—an expert in such matters—was willing to give £100 for a very large

one of a convex shape, perfectly symmetrical and without a fault. Since then pearls have greatly declined in value. Some of these pearls have a yellowish tint. I have seen valuable *black* pearls, perfectly round, taken out of clam; one was of an extraordinary size.

In the uplifted belt of dead coral which protects such islands as Mangaia, Atiu, &c., from the inroads of old ocean, fossil clams of existing species are very abundant. It seems strange to see these shells imbedded in hardened coral rock 100 feet above the level of the sea. Of course this is the result of volcanic agency at some remote period of the earth's history.

Natives have a superstition that somewhere in mid-ocean there exists a clam of gigantic proportions, capable of receiving a double canoe with its living freight between its valves, and ever on the watch for unwary voyagers!

Voice in Fishes.—Man, beasts, birds, and many sorts of insects are endowed with voice. Is this gift denied to the denizens of the deep? The ancients seem to have thought it was; for the classical student needs not to be reminded of the oft-recurring phrase, 'mute fishes.'

Scientific voyagers have made us acquainted with the extraordinary sounds emitted, often from great depths, by drum-fishes, of which no representative has yet been discovered in the South Pacific. Many kinds of fish in these seas utter a distinct cry of fear or pain, *e.g.*—

I.—The *vete*, a fish about twelve inches in length, and weighing from one to two pounds. Bright yellow streaks run the entire length of its body. When held in the hand, or killed (by breaking its neck), it cries

from its throat 'Ngeê!' This circumstance furnishes the islanders with a favourite expression for the death-cry of those clubbed in heathenism. Hence, too, the proverb (slightly varied on different islands) in relation to a violent death:—

Kio a Vete
Tangi a Vete
Avini a Vete
Ngeê a Vete
= Screamed like a (dying) Vete.

II.—The *rākoa*, a fish closely allied to the preceding; distinguished from it, however, by having black round spots on its tail. When caught or killed, its cry is exactly like that of the *vete*.

III.—The *kukukina*, or young cavally, when caught on the hook or in a net, utters an imperfect guttural sound like 'Ak! ak!' It is named *kukukina* in allusion to this circumstance. Yet this fish, when fully grown, utters no cry whatever.

IV.—When the *kokiri* sees the hand of the fisherman coming to take it out of its hole, without the possibility of escape, it cries 'Ko! ko!' The sound evidently proceeds from the stomach, and is produced by the sudden expulsion of sea-water.

V.—The *ume*, known among sailors as 'the leather jacket'—a fish with a thick rough skin, formerly much prized as a covering for the upper part of their stone adzes previous to braiding them with sinnet—when in circumstances similar to those of the *kokiri*, cries 'Oo! oo!' Yet it is silent when killed. The tail of the *ume* is furnished with four formidable spurs, two on either side, capable of inflicting terrible wounds. To avoid this, it is usual for the fisherman

to bind his hand round and round with cloth. Many persons erroneously imagine the sound referred to above is produced by the furious lashing of its tail at the approach of a foe.

It is the cruel practice of these islanders, when removing the *baracoota* from the hook, to insert the thumb and forefinger into its great eyes, in order to prevent its slipping back into the ocean. In its agony it invariably utters a faint 'ē—ē—ē!' It utters the same sound when killed.

When a fleet of canoes is out on a pitch-dark night after *baracoota*, the natives are often startled by a booming 'Oo! oo!' intimating the close proximity of a 'black-fish'[1] (which, by-the-bye, is a mammal, and not a true fish at all), which has come up to breathe and to disport itself. Of course, they are well pleased when the dangerous visitor sees fit to take its departure.

Ocean-wealth. — Sailing in the John Williams north-east of Lord Howe's Island, at dawn one December morning, the ocean swarmed with small fish resembling sprats. Sea-birds hovered above, gorging to their hearts' content. Shortly afterwards shoals of *bonito* (*Thynnus pelamys*) came along in hot pursuit. With half-a-dozen pearl-oyster hooks, and no bait whatever, in less than an hour we caught one hundred and sixteen *bonito*, the greater part of which was salted down. Throughout the day we were slowly sailing through a countless multitude of *bonito*. After Captain Turpie had desired the fishers to cease their occupation (as our salt was done), one or two furtively and cruelly amused themselves by catching these fine

[1] A species of whale—*Physeter tursio*.

fish and throwing them back alive into the ocean. We might easily have caught a couple of thousand before sunset.

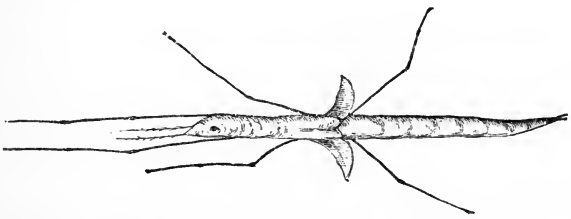
Throughout the following night the sea was illuminated; for as the *bonito* rushed through the water near the surface they became phosphorescent—a sight never to be forgotten by those who witnessed it. Towards daybreak, however, a strong breeze sprang up, and we saw no more of these moving masses of fire.

The *bonito* belongs to the mackerel family. It is usually thirty inches in length and twenty inches round, of a steel-blue colour, with four stripes along each side. The flesh is of a dark colour, and proved an acceptable change of diet to all on board.

Mode of Killing Fish.—The only word in the Rarotongan dialect for the nape of the neck is 'the killing-place of fish' (*kātianga-ika*), in allusion to the immemorial and universal practice of the South Sea Islanders to kill fish caught by the hand by a bite on the neck. Of course the fish is held laterally for the purpose. Occasionally accidents occur from holding the fish in a wrong way. A short time ago a lad having secured a small fish, unwisely held the head *towards* himself. As soon as he opened his mouth to kill it, the fish, seeing an apparent mode of escape, darted into his mouth and wedged itself so firmly in the throat that it was impossible (on account of the sharp spines of its dorsal and ventral fins) to get it out. The poor fellow died in great agony on the third day. A young woman on a neighbouring island met with her death in a similar way.

The Phasma, or Spectre Insect.—The only species

of this remarkable family of insects in the Pacific with which I am acquainted is the *Lopaphus coccophagus*, or 'cocoa-eating lopaphus.' It spends its life exclusively upon the leaves of the cocoa-palm. It escapes observation by adhering to the under side of the leaflet, which it closely resembles in colour. It must be a very severe gale to dislodge this insect. Unfortunately, it is common not only in the Hervey group, but throughout the Pacific. An invasion of these voracious insects is almost as much dreaded by the islanders as a plague of locusts would be in the East. I have seen immense groves of cocoa-palms destroyed in a few



LOPAPHUS COCCOPHAGUS, OR COCOA-EATING LOPAPHUS.—(*Sketched (roughly) from nature by W. W. Gill.*)

months by this species of *Phasma*. Great fires are sometimes lit by the natives underneath the trees, in the hope of smoking them to death, but with little advantage. It seems inglorious that a palm which has braved the storms of a century should eventually succumb to an insect. This *Phasma* begins its ravages on the long leaves and ends with the crown, when the palm of course dies.

The natives call this insect the 'ē.' Its body is long, slender, and cylindrical. The female attains the length of seven and a half inches. Her colour in life is a bright green. The male, which is of a light brown

colour, and might easily be mistaken for a dried twig, is much smaller than his companion, being only five inches in length. The wings of both male and female consist of one delicate membrane of a rose colour, folding up like a fan. The wings of the former are twice the size of those of the latter; still, they are quite disproportionate to the size of the insect. The fact is, this remarkable creature has but little use for its wings, as it is doomed to spend most of its life on the leaves of a single tree. The wing-covers are narrow and thin. The eyes[1] are large but not stemmated, the head pointed, and the thorax elongated. Its three pairs of legs, used not for combat or prehension, but for occasional locomotion, are precisely similar to one another. The feet are composed of a number of tiny claws, very sharp, constituting a complete hook. There are also claws on the underside of each leg. The odour of the slain insect is intolerable, being that of the North American skunk, only fainter. The tail is spiked.

The spectre-insect spends most of its time asleep, gently rocking to and fro in the breeze, clinging to the rough inner side of the leaflet, out of sight of all enemies. After a cyclone the earth is in many places covered with them. It is interesting at such times to note with what celerity, but extreme awkwardness, these ordinarily sluggish insects stalk over the grass in search of a new home in some cocoa-nut palm which has survived the storm. Fowls feed greedily upon these unfortunates.

The *Phasma* often figures in the ancient songs and myths of these islanders as the offspring of a goddess

[1] Seen under the microscope, they are a marvel of beauty.

named Kui-the-Blind, and was associated with the worship of Tanè or Baal.

A Solitary Wasp of the Hervey Islands.—This insect—of a bluish-black colour—is designated by the islanders *uu* (pronounced oo-oo) in imitation of the humming sound it makes when at work. It is known to scientists as a species of the *Eumenes*. Unlike some other species, it invariably selects a dry, well-sheltered place for its nest. It is a perpetual annoyance to the European resident, as it loves to build its clay-nest within the folds of linen, between the backs and covers of books, in key-holes, cracks of furniture, or even in the corner of a sofa where the covering does not quite fill up the space. You are sure that it is at work somewhere by its hum; but it is not always easy to discover the exact spot. In hot, rainy weather it is interesting to watch the female darting out into the garden to bring in well-kneaded earth for the purpose of building its nest, or rather series of nests. There is lying before me an average specimen, four and a half inches long and half an inch wide. Inside this rough clay building are seven distinct compartments or cells. The whole was built and stored with food in two or three days. When completed, a single egg was deposited in each cell, along with a number of spiders and small flies, intended to serve as food for the larvæ. On releasing some of these prisoners, I found that, though still alive, they made no attempt to escape, proving that they had been stung previous to their being walled up. The sting, belonging only to the female, is severe. As soon as the larva is hatched it attacks the imprisoned spiders and devours them. By the time the supply of food is exhausted it has attained

its full size, and is ready to enter upon the pupa state. The destruction of spiders by this *uu* may be judged of by this—I counted eighteen small spiders in one compartment, besides a number of spider eggs. As soon as this spider-eating insect has become mature, it easily perforates the walls of its prison-house, and is quite able to provide for its own wants.

It is noteworthy that this troublesome yet interesting insect has only recently been introduced into the northern island of New Zealand from the South Sea Islands. My impression is that it was accidentally introduced from the Hervey group in connection with the considerable trade which has of late years sprung up between Auckland and Rarotonga.

The Mosquito.—Natives invariably sleep with the head covered, as a protection against the bite of the mosquito; yet there are some islands where this annoying insect was until lately unknown. The old men of Penrhyns, Rakaanga, and Manihiki assure me that no mosquito was ever seen on those *atolls* until some years after the introduction of Christianity. Although mosquitoes were (accidentally) conveyed to Penrhyns and Rakaanga in 1859, and to Manihiki so lately as 1862, in water-casks filled at Rarotonga, they are now plentiful on all three islands. Curiously enough, up to the year 1880, fleas have not made their appearance. Danger Island too is free from fleas, although cursed with millions of mosquitoes.

In New Guinea I have seen numbers of nude natives sleeping near watch-fires, covered with sand, all but the head and arms, on account of mosquitoes. Trousers are but a poor protection against their bites. Many natives keep a wood-fire smouldering through the

night in order to drive them away. Lizards feed on these insects. It is amusing to note their marvellous cleverness at the sport.

'Fortunate Isles.'—The two great pests of the South Sea Islands are mosquitoes and fleas. About seven hundred miles N. and N.W. of Rarotonga lie the low coral islands of Penrhyns, Rakaanga, and Manihiki. Until lately, as we have just seen, these islands were exempt from both.

The only representative of mammalia indigenous to those islands and to Danger Island—and still numerous—is a small brown rat. The so-called Norway rat has lately been introduced to Manihiki by wrecked kidnapping vessels. Rats were not eaten on any of those islands, on account of the great abundance of fish.

The Flea in the South Sea Islands.—It is a curious fact that these vermin were introduced into many parts of Polynesia by Europeans at a late date. The natives of Aitutaki sagely conjectured them to be the spirits of defunct white men. Fleas were introduced to Mangaia in 1823. They were conveyed to Rarotonga about the year 1820 by a Captain Goodenough, who discovered that island. But if fleas were late in coming, they have made abundant amends by their terrible multiplication. During a five years' residence at the village of Tamarua we saw only two, but of late they have become a perfect pest. The native practice of sleeping on dried grass covered with a mat is favourable to their rapid increase. In visiting the out stations, to avoid being entirely devoured by them, we generally sleep in our clothes, boots and all. Sometimes I have tied the legs of my trousers with a piece of string to prevent the fleas from getting

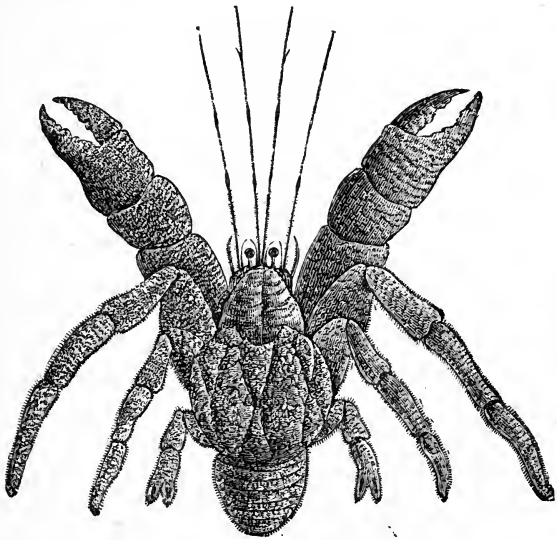
all over my person. They breed in the dust and sand, and seem to be ubiquitous. Once when riding along the sandy beach at Tahiti, near Point Venus, the fleas leaped out of the hot sand upon my legs. I spurred my horse to get clear of them. On Mangaia I have sometimes seen the legs of my white trousers black with these disgusting insects.

The Grasshopper.—Two sorts of grasshoppers abound on Rarotonga—the green and the brown. A remarkable superstition obtains about these insects. Should a grasshopper alight upon a native, he is bound to die! As these insects are very plentiful in the bush, where the natives go to fell timber and get plantains, this ancient superstition becomes a very serious matter. At night grasshoppers, attracted by the light, are apt to fly through the open door and settle down on some member of the household. The usual exclamation is, 'Yon grasshopper has come to foretell your decease!' (Kua tapakeia koe, ka mate koe!) The younger generation, however, laugh at the fears of their parents.

A Strange Custom.—In three islands of the Hervey group—Atiu, Mauke, Mitiaro—so valuable were pigs formerly, that down to my own time it was customary for women to suckle and carry them about as pets. I knew a woman who had one of these pets, grown to the size of a fat porker, that followed her about as a dog wherever she went. Her custom was to tie up her pet on Sundays, to prevent his following her to church. One Sabbath morning he contrived to get loose and followed his mistress to church, occasioning no little confusion. This escapade occasioned the demise of the pet, the feeling of indignation being too

strong for her to withstand. The Rev. James Chalmers reports that in crossing the south-east peninsula of New Guinea, it was quite a common thing to see a woman nursing a young pig; and for a chief's wife to cry bitterly at the killing of a pig intended for the entertainment of the visitors.

The Robber-Crab (*Pagurus latro*).—When any of



THE ROBBER-CRAB.

the islets that stud the coral reefs at Manihiki and Rakaanga are formally tabooed in order that the cocoa-nut palms may be untouched, parties of twos and threes will sometimes cross the lagoon at sunset to catch robber-crabs. On arriving at the scene of action, torches are lighted, and the young men listen attentively to the movements made by the crabs. If light and quick, young robber-crabs are on their travels.

But if heavy and occasional, there are only a few very large fellows moving about, to the great exultation of the crab-hunters. A fine specimen will measure over two feet in length. When feeding they are easily caught, as they are at such times oblivious of danger. The aim of the crab-hunter is to get hold of the back, secure the pincer-claws, and then pound those claws to pieces. The legs are then twisted across, and the prize thrown into a basket. Four or five baskets, each containing about twenty robber-crabs, will be filled by a party of two or three in a single night.

These crabs are often found under the external roots of the *Pandanus odoratissimus*, also in the hollows of the *buka*-tree (*Hernandia peltata*). A stick is inserted to discover the exact whereabouts. As soon as it is seized by the crab, it is easy to judge of the direction and depth of the burrow. The rest now dig, and speedily secure the crab. The burrow of the robber-crab is in a slanting direction, but never very deep.

Should the hole prove very short, it is usual to insert the hand, keeping it close to the roof to avoid being bitten, and so capture this fierce creature. A native, who had often boasted that he was too clever to get bitten, had inserted his arm in a burrow one night, and was feeling about for his prey, when the crab, who had made a second exit to its abode, came down upon him from above and made *him* a prisoner! The unlucky crab-hunter shouted lustily to his friends to come and dig out the robber-crab, and so release the hand. This was done, but the hand was severely injured. My friend was ever after somewhat doubtful about engaging in this sport.

If the burrow be too deep for the hand, the best plan is to light a torch of dry cocoa-nut spathes and insert it in the hole. Annoyed at the light and heat, the crab endeavours to extinguish the torch. If the torch be slowly withdrawn, the crab will follow it angrily, and it can be seized as soon as it reaches the surface.

One night a lad espied a good-sized robber-crab inside a hole at the root of an ancient *buka*-tree. Putting in his hand to catch it, he was unfortunately caught himself. The lad yelled in agony. As there was no way of getting at the crab except by cutting away one side of the tree, it was some time ere he was released. The abdomen, which is remarkably sensitive, being then slightly pricked, the creature instantly relaxed its grip. Had the lad possessed the presence of mind to remain perfectly still, the crab would in a little time have released him. At each tug of the lad the crab tightened its grasp.

A number of robber-crabs will sometimes climb a cocoa-nut tree laden with fruit, and throw down every edible nut. Those below at once set to work to husk the fallen nuts. An ordinary-sized robber-crab will finish the husking on the first night, reserving the feasting upon the contents for the second night. But a large and powerful crab will in one and the same night husk the nut, and then breaking off a small bit of the hard shell in the neighbourhood of 'the monkey's eye,' so as to get a firm hold of it, deliberately break it on a stone and quietly enjoy the feast.

But what about their friends on the crown of the cocoa-nut palm? They usually reserve to them-

selves a nut apiece, husking the same in their aërial abode, and then break off the shell with their pincer-claws bit by bit, till able to get at the rich kernel.

Tradition affirms that these crabs were formed originally out of drops of rain falling upon the crown of a cocoa-nut tree! A native of Rakaanga remarked to me, 'We think there must be some truth in this, because we find great numbers of tiny robber-crabs on the tender crowns of cocoa-nut trees.' I asked, 'But do you not find them elsewhere?' 'Yes, we find myriads near the sea.' Of course these were the spawn just hatched in the still waters of the lagoon, on their way to the interior.

It is customary at Manihiki and Rakaanga to put thatch round the trunk of cocoa-nut trees, about half-way from the ground, to prevent rats from stealing the nuts. This plan is entirely successful for rats, but is no defence whatever against the great robber-crab, so well named!

The robber-crab is accustomed to select a cocoa-nut shell as a shield for its hinder parts, just as the hermit crab tenants various shells. It is amusing to see a troop of robber-crabs on the march, dragging their shells after them.

A little girl on Atiu discovering near her dwelling the burrow of a robber-crab, resolved to make a pet of it. She secured it with a strong piece of string, sufficiently long to permit it to retire to the bottom of its hole to sleep. When about to feed it, she would 'chirrup' to the crab to come up, taking care to drop a few rich morsels down the hole. Although daylight, the robber-crab's time of sleep, it could not resist the temptation. In a few days it became tame, and learned

to distinguish the voice of the little girl. The crab was fed twice or thrice a day. In addition to its staple diet of cocoa-nut kernel, it ate freely ripe pandanus drupes, papaw-apples, &c. In a few months the pet grew enormously fat, and became an object of interest to all the neighbours. Unluckily, however, for the pet, the family went off for a few days to a distant part of the island. On their return, my young friend ran with some bits of cocoa-nut to feed it as usual, but the crab had disappeared. During her absence a hungry neighbour availed himself of the opportunity to catch and feast on her strange pet.

SECTION II.

BOTANICAL NOTES.

Lianas, or Tropical Climbing Plants.—The primeval forest of Rarotonga, and many others of the South Sea Islands, are almost impenetrable, on account of the marvellous climbing, twining plants that abound therein. These shrubs ascend the loftiest trees; then descending half-way to the earth, run up the next, and so on and on, in vast festoons. The stems of many of them being round and smooth, seem like innumerable skipping-ropes suspended at all heights by friendly fairies for the amusement of mortals, their only visible leaves intermingling with the top foliage of the trees which support them. Here and there are seeming coils of rope of enormous thickness, the lower ends rooted in the soil, the upper twining round and round the trees they often kill by their too close embrace. To complete the illusion, some are two-stranded; others three-stranded. These immense coils in each case represent a decayed tree round which the plant originally twined. The supporting tree is now part of the soil; whilst the coils of the liana have subsided, the upper end still flourishing on the tops of the neighbouring trees. The entire forest, dark at midday, is thus one maze of living network, through which

natives slowly cut their way with heavy, sword-like knives.

All these strange climbing plants are leguminous, the most important of them being the *Entada scandens*, which has twice-pinnated leaves, with small white flowers growing in spikes at the end of the leaves. In the Hervey group the pods are from three to four feet in length; at New Guinea and elsewhere they are much longer. The seeds are two inches across, with a beautiful polished shell of a purple colour. Fancy snuff and match boxes are made out of these seeds in Queensland. I shall never forget a night spent on the southern coast of New Guinea in 1872. Numerous fires were blazing, drums beating, nude warriors, as they danced, dangled the skulls of their victims, whilst common people, in lieu of skulls, held in each hand a dried pod of the *Entada scandens* as a rattle.

In most of the South Sea Islands this plant furnished the only rope of bygone days. Whilst green it is equal to European cordage in strength, but when dry it is brittle and worthless. Immense logs of timber are dragged from the most inaccessible places to the shore by means of these extempore ropes. They are obtained here in lengths of 150 feet, perfectly round and smooth. This plant has from time immemorial supplied the young people of these islands with swings and skipping-ropes. By the way, in skipping, it is usual for two or three young men at each end slowly to swing round and round the long living rope, whilst a number of girls skip in perfect unison. At Atiu, until lately, a coarse kind of native cloth was prepared from the stem of the *Entada scandens*, by beating it with wooden mallets.

This plant often attains to a great size. I measured one twenty-six inches in diameter. There are two varieties here, differing from each other somewhat in leaf, colour, and smoothness of stem. The sort known as *kākā-vari-kai* is that used as rope; but it is useful to know that the smooth-skinned, dark sort (known as *kākā-vai, i.e.*, the watery kākā), when cut yields a copious and refreshing drink to the thirsty woodman. This is a most precious gift where no cocoa-nut palms grow and no stream flows.

The contortions and windings of these tropical climbing plants have originated the proverbial designation for a deceitful, slippery fellow—'a man whose heart is badly twisted as the kākā, or lianas, of the forest.'

The Banyan Tree.—The banyan tree is common on all the volcanic islands of the Pacific, furnishing the natives of Polynesia with a strong but coarse kind of clothing. The bark of the roots and straighter branches are beaten out with iron-wood mallets by women. At Rarotonga the banyan tree was valuable private property; on Mangaia it was free to all. It is remarkable that the natives of Melanesia were until lately ignorant of the manufacture.

This famous tree attains the height of from 60 to 70 feet. It is a species of fig (*Ficus prolixa*); has dark ovate leaves six inches long; and produces a small yellow fruit, of which pigeons are very fond. One of the most interesting specimens I ever discovered extended, after a most irregular fashion, over nearly two acres of ground. I counted thirty mighty stems, each consisting of a number of serpent-like roots twisted together—several hundreds in all. The real

trunk of the tree—of wonderful length—was suspended in mid-air, at a height of upwards of 40 feet, supported by aërial roots shooting down into the soil like the stays of a ship. The tree itself did not exceed 30 feet in height; but elevated on these lofty shafts it beggared description. My native companion clambered up to the main trunk and ran along the entire length, at times entirely hidden from view. At first the trunk was perfectly horizontal, then on an incline, at the top of which it again became level. It then descended gradually until finally towards the sea the roots clasped a chestnut tree (*Inocarpus edulis*), of course dooming it to destruction. Many of the stems had been cut down, but were rapidly being replaced by younger ones, the smallest being of the thickness of twine. In one of the stems which happened to be hollow, a number of persons could find shelter. Ages ago a pigeon dropped a seed in the crown of a palm or in the fork of a lofty chestnut. That seed germinated; the roots encircling the tree descended to the earth, eventually killing the tree that nourished its infancy; but not until its horizontal branches had rested upon other trees, thus giving it occasion to send down to the soil fresh roots. As these strangled trees mouldered away, the immense stems we saw took their place. As the trunk grows heavier, additional supports become necessary; hence the masses of tassel-like roots dangling in mid-air seeking the ground that everywhere obstructed our progress. The points of these roots are yellow; as soon as they touch the soil they rapidly increase in bulk and become eventually solid pillars to aid the advance of the suspended trunk. The effect was marvellously weird; at midday there was but twilight.

The banyan tree is occasionally propagated by slips as boundary marks, being almost imperishable; but such trees are easily distinguished from the natural parasitic growth. It is often seen on ancient *maraes*;[1] being valued for shade and for the awe inspired by its fantastic growth. A bird or a bat making a house in its branches was perfectly free from molestation.

The ancient myth is that a pigeon—the favourite messenger of the god Tanè—brought the original seed from the moon, and, dropping it on a palm, gave birth to the first banyan tree on earth!

A banyan tree at Mangaia, growing at the edge of a precipice of some 50 feet, shot down several aërial roots which took firm hold of the soil. A fugitive from an engagement fought just before the introduction of Christianity was chased by a foe. Seeing no other chance of escape, he leaped as high as he could to clutch the roots, and planting his bare toes against the face of the rock, actually clambered up to the top, far out of the reach of the warrior who stood below vainly brandishing his wooden sword at him.

Two young sailors ran away from a whaler, and hid themselves in a lofty and almost inaccessible place. Being discovered and hunted on the third day, they were at their wits end how to avoid being captured.

[1] A distinguished modern writer asserts that 'the Polynesians affix a sacred character to a species of banyan, called the *aoa*.' It is true that the banyan and the *tamanu* (*Calophyllum inophyllum*) were planted by the priests to shade their *maraes*; more commonly the *tamanu*. But there was no hesitation whatever about felling *tamanu* trees for canoes, or barking the banyan for making native cloth, provided they grew on non-sacred ground. The sanctity belonged to the god worshipped, not to the trees.

Espying an ancient banyan tree growing at the edge of the cliff, a number of whose aërial roots reached the ground, the reckless young fellows committed themselves—not without considerable misgiving—to these natural ropes, and actually got to the bottom in safety, thus completely outwitting their pursuers! The depth was nearly 100 feet. If one of these aërial roots be only of the thickness of a thumb, it will bear the weight of a full-grown man.

A cannibal at Rarotonga being hunted by the relatives of his victims, took refuge on the suspended trunk of a famous banyan tree lately dead. At nightfall they surrounded the tree with lighted torches; and on discovering the wretch, vigorously assailed him with spears. He dextrously avoided these missiles by dodging backwards and forwards. Still spears rained upon him. Finding that the agile cannibal eluded all their efforts to wound him, they promised him life if he would surrender. Deceived by their fair words, or possibly in despair, he came down, and was immediately speared to death. To each of the attacking party a portion of his body was assigned, and taken home to be cooked and eaten in revenge that same night.

The native name of the banyan tree is *aoa*.

The Bread-fruit Tree.—The staple diet of the Rarotongans consists of bread-fruit (*Artocarpus incisa*) and plantains. The bread-fruit harvest marks the arrival of summer, so that its name is a synonym for plenty. These islanders speak of 'bread-fruit and winter,' *i.e.*, summer and winter. Plantains mostly grow in distant and almost inaccessible valleys, whilst bread-fruit groves often surround their dwellings. When in season, and no untoward gale has destroyed

the young crop, an air of contentment rests upon the countenances of the islanders. A lad provided with a basket will climb a bread-fruit tree near the blazing oven; in three-quarters of an hour the household meal will be ready.

This tree was originally, and is still, planted; but once in the ground, it propagates itself on all sides by shoots that spring from the roots. In three or four years they bear fruit. In the course of time they become stately trees, from forty to fifty feet high, sparingly covered with large pinnated leaves of a dark green. These glossy leaves, eighteen inches in length and but little less in breadth, are elegantly cut into fingers. The trunk is slender for its height, being usually two feet in diameter. Occasionally larger trees may be seen. Under its imperfect shade bananas, coffee-plants, &c., flourish.

Seven varieties of bread-fruit are indigenous to Rarotonga; the eighth—until lately deemed sacred—was brought from Tahiti by Tangiia, the chief of one of the two original bands of settlers. Whilst most of them are very fine—the size of the largest husked cocoa-nut—one variety is no bigger than a large orange. The rind is generally very rough. They vary in weight from one and a half to five pounds. Some are oval, others perfectly round. They grow either singly or in clusters of two or three. At Rarotonga the trees bear only once a year; at Aitutaki and some other islands twice, or even thrice. Before putting the fruit into the native steaming oven, the outer skin is pared off and it is cut in half, so that it may be more speedily cooked. Unlike our bread, it should be eaten hot, and is then very palatable indeed.

When perfectly ripe, the cooked fruit is of a pale-lemon colour. The large core is, of course, removed, the edible part being about two inches thick all round. A single large bread-fruit is a substantial meal for one person. When cold, it is by no means palatable.

Newly-plucked bread-fruit will remain good for three or four days. If pierced, a milky juice exudes, and the fruit rapidly decays. Other food, when decayed, must be thrown away; not so bread-fruit. The pulp of a number of decayed bread-fruits (which as yet have no offensive smell) is emptied into a clean wooden trough, the rind and core being thrown away. The whole is then well mixed and worked together until the appearance is that of thick batter. It is now wrapped up in leaves of the indigenous banana and baked. When turned out, it is of a rich brown colour. To those accustomed to it, it is delicious, whether eaten hot or cold. This is the *pake*, or famous bread-fruit pudding, of the South Sea Islands.

When it is impossible to consume all the bread-fruit (and the season of scarcity follows closely upon the heels of this superabundant plenty), the plan is to dig a hole in the ground, not too deep, line it well with plantain and banana leaves, and then pour a great quantity of liquid bread-fruit into it. Trough after trough will have to be emptied ere the hole will be filled. Five hundred large bread-fruits should go to one such pit. The top is then covered with leaves and well weighted with stones[1]—not too closely, however, as it is desirable that the gas generated by fermenta-

[1] Hence the native proverb, 'Wise chiefs are the *maî* stones that repress the evils of society.'

tion should escape. This thick paste will remain good for a whole year. When the household is short of food, the covering of the pit is removed, and a portion of the contents taken out and cooked. The appearance is of a bright-lemon colour; the smell (arising from fermentation) is by no means agreeable. The leaves between the paste and the soil must be frequently renewed. This *maî*, as it is called when cooked, is about the hardness of cheese, slightly, but not unpleasantly, acid. It is much prized by the natives. Many Europeans profess to be disgusted at it; but the Polynesian equally objects to our 'fine old Stilton cheese.'

At Manuâ, a small cluster of islands forming the eastern part of the Samoan group, pits four feet square and twelve feet deep are filled with *maî*, which keeps good for three, and even four years. The secret is, the pits are well lined with thick leaves of the *Barringtonia speciosa*, sewn together with the split midrib of the cocoa-nut leaf. An incredible number of bread-fruits are required to fill one such pit. Young trees may be seen growing over these pits; the roots never strike into the *maî*, as the heat would speedily destroy them.

When the paramount chief, Tui Manuâ, wishes a pit of *maî* to be prepared, it is made six feet square and sixteen feet deep. To fill it on the day appointed, those under him empty their smaller pits in the different plantations belonging to him. For this curious information about the bread-fruit pits of Manuâ I am indebted to Taunga, who for thirty years was pastor there.

A sort of caoutchouc is obtained from the bread-fruit tree by bruising the bark early in the morning, and at

sunset collecting the hardened mass which has exuded. It is used for caulking canoes, etc., but requires to be heated over a fire before it is used. Mixed with pounded candle-nuts, this gelatinous substance furnished the universal bird-lime of the Pacific Islanders, so much prized before the introduction of firearms. The timber of the mature tree is light and durable, the white ant never attacking the *dark* wood. It is extensively used in canoe and house building. At Samoa a roof of bread-fruit wood is still regarded as an heir-loom almost beyond price.

From the inner bark of the young tree is made a light, soft, brown cloth, much prized by the natives—less, however, than the white cloth prepared from the paper mulberry-tree. In 1852 I saw at Huahine all the women of the island beating out a single piece of bread-fruit cloth, several hundreds of yards in length, for the expected visit of the late Queen Pomare. Their ironwood mallets struck the soddened bark in perfect time. The rapid extension of commerce in the Pacific has already caused bread-fruit cloth to be a rarity.

Another sort of bread-fruit (*Artocarpus integrifolia*) containing edible seeds has been introduced from Samoa. Its distinctive scientific name is derived from the circumstance that its leaves are undivided. This jack-fruit, as it is often called, is indigenous to Samoa, the islands of the Western Pacific, and the Indian Archipelago. It is far inferior to the ordinary bread-fruit of Eastern Polynesia. I do not care for it myself. On the southern coast of New Guinea I saw some noble trees; but the black Papuans were too lazy to climb them to get the fruit.

It is impossible that such a fast-growing tree should attain to a great age. It is doubtful whether the century is ever exceeded.

I subjoin a fragment of a song composed by a woman named Mouranga, a native of Mauke, upon the occasion of her sending a gift of fine bread-fruit cloth to Tu,[1] the king of Tahiti, mentioned in Captain Cook's *Voyages*. The song could not have been composed later than A.D. 1770. The late Queen Pomare was a descendant of this same Tu. Mouranga wished to gain a royal lover, and believed that her gift would prove irresistible. A storm, however, drove back to Mauke the great double canoe that was to convey it 500 miles over the ocean. So Tu remained ignorant of the intended present.

Te pakaku, e vaio i Mauke,
Te kiri mango, e vaio i Mauke.
Taku pokuru rairai ē
E kave ki Tahiti,
Na Tu ariki e kakau mai.

Coarse garments are good enough for Mauke,
(Though rough) like the skin of a shark, they'll do for Mauke.
But my delicate bread-fruit cloth
Must be borne to Tahiti,
For the royal *Tu* to wear.

When a man was killed in battle, the body was usually eaten; the head, however, had to be presented to Tangaroa on newly-plucked bread-fruit leaves.

[1] The 'Otoo' of the printed narrative standing for 'O Tu.' The 'O' is the usual prefix to proper names in the nominative case, when they precede the verb. 'Otaheite' is now correctly spelt 'Tahiti.'

The Papaw Apple-tree.— This valuable tree (*Carica Papaya*) was introduced into the Pacific from Rio Janeiro by the early voyagers. In appearance it is not unlike some kinds of palm, occasionally attaining the height of thirty feet, with a stem about eighteen inches in diameter at the base, but at the summit only four or five inches. This tall, tapering, and usually branchless tree is sure to arrest the eye of the stranger.

The top of a papaw apple-tree that grew in my garden having been snapped off in a gale, three strangely contorted branches, all bearing fruit, sprang out of the original stem.

The trunk is mostly hollow, reminding one of the bones of birds, in which lightness and strength are combined. The leaves are seven or nine lobed, according to age, and two feet in diameter. The foot-stalk is two feet and a half long. The male and female flowers are found on different trees. The former grow in small clusters. It is otherwise with the female flowers, a single fruit appearing immediately above each leaf-stalk. As the fruit becomes mature the leaf often drops off, so that the appearance of the tree heavily laden with large yellow fruit at the summit is very striking. About a hundred apples in different stages of growth may be counted on one tree.

Like the cocoa-nut palm, the papaw tree bears all the year round in a fruitful soil. The apple itself often weighs four pounds; in shape it is like a small melon. The interior is hollow, and covered with a great number (from 1,200 to 1,500) of shrivelled black seeds, in taste not unlike nasturtiums. These

seeds are enveloped in a glutinous substance, by means of which they adhere to the fruit. The papaw apple, when ripe, is pleasant to the taste, but deficient in acidity of flavour. The natives of this group depend in a great degree upon it in times of scarcity. They eat it both raw and baked. Sometimes it is mixed with the expressed oil of the cocoa-nut before cooking, and is then very nutritious. Delicious jam may be made of the papaw apple by adding a little lime-juice. It is invaluable for feeding pigs and poultry.

The milky juice of the unripe fruit, as well as of the leaves, trunk, and root, is very acrid. It is a specific for ringworm, a second application being in general sufficient to remove the complaint.[1]

The juice of the papaw apple has the remarkable property of rendering tender the toughest meat. When a fowl is hastily killed for the table, we are accustomed to slice a ripe papaw apple, and envelope the fowl in it until it is put into the oven. The flesh is sure to become perfectly tender under this process.

The papaw tree is never cultivated in the islands, as it spreads with amazing rapidity. Having cleared some twenty-five acres of rocky soil to form a plantation of cocoa-nut palms for the use of the Institution, I was astonished, after the lapse of a few months, to find the whole covered with papaw trees in fruit. Who can wonder at the indolence of the

[1] It seems strange to me that so valuable a tree has not yet been cultivated in some of the warm parts of Australia, which appear to be well adapted for it. I noticed it here and there on the coast of Northern Queensland in 1873.

inhabitants of the tropics, seeing that Nature has provided them with such a superabundance of food?

This tree, however, is short-lived; cattle, horses, and pigs all attack it, feeding on the fallen trunk as well as on the leaves and fruit.

The native name for the tree and fruit is *ninita*. Sailors invariably designate it 'mammy apple.' It is amusing in printed and written lists of prices of produce at different islands to read mammy apple; never papaw apple. This originated in the ignorance of the early whaling captains, who took *papaw* for *papa*, and then by way of joke converted it into *mammy*.

Screw-Pine, or Thatch-tree of Polynesia.—The appearance of this tree is very remarkable. The spiral arrangement of its long sword-like leaves suggests the idea of an enormous screw. It is known to botanists as the *Pandanus odoratissimus*; it is called by the natives *ara*. It sometimes attains the height of forty-five feet. The male and female flowers are on different trees. The great bunches of the former—of a light-yellow colour—finely contrast with the deep-green foliage of the tree.

Numerous red and yellow fruits, nearly round, and weighing from seven to ten pounds apiece, remind one of enormous pine-apples. Stout aerial roots, with cup-like spongioles, shoot down from the highest branches of old trees to the earth, thus supplying them with additional support and nourishment. One is amazed at the immense weight of trunk, branches, foliage, and fruit sustained by a number of prop-like roots, some five or six feet above ground. This wonder is often

increased by seeing the trunk terminate above ground. The narrow leaves—sometimes seven feet in length—are armed along the edges and midrib with sharp

SCREW-PINE.

hooks. Native lads angle for shrimps with these tiny hooks.

The screw-pine grows everywhere in the Pacific, less

commonly on the shores of New Guinea and the adjacent islands. Like the cocoa-nut palm, it loves the neighbourhood of the sea, and grows luxuriantly on the poorest soil; but, unlike that palm, it also thrives on the barren clay hills of the interior of many islands. It is the first fruit-bearing tree that grows out of the sand and shingle of newly-formed *atolls*. In the Line Islands, during frequent seasons of drought,[1] when the cocoa-nut palm ceases to bear fruit, the natives contrive to exist upon fish and the drupes of the never-failing screw-pine. The inner part of the drupe is fleshy and pleasantly sweet. Several tiny kernels, in extremely hard shells, fill up the outer part. On many of the Gilbert Islands preparations of the pandanus were presented to us, as the most valuable gifts they could bestow. First, the ripe fleshy parts of the drupe, pounded into a flat cake, in appearance like a mass of pressed oakum; this we could not eat. Next came extremely thin, paper-like stuff, consisting of the sugary juice of the fruit dried in the sun; this was very palatable. Lastly came a sort of sawdust, or fine nutritious particles out of the kernel and drupe dried; this, too, was very nice, but it would take a great deal of such food to satisfy the appetite. We gave the whole to the teacher.

The long tough leaves of the screw-pine furnish the best thatch in the world. It is usual to pare away the

[1] On one island there was recently a drought of *eight years*. It was painful to gaze upon those starving, heathen islanders, without the ability to relieve their wants. To save life many emigrated to distant islands, returning home, however, as soon as they heard that rain had fallen. In the Line Islands bunches of pandanus fruit sometimes weigh forty or fifty pounds apiece.

prickly edges and midrib with a knife. The leaves are 'sewn' on reeds, or on the split adventitious roots of the parent tree. On some islands, until very lately, human rib-bones were employed for this purpose. It is to the process of 'thatch-sewing' that the natives are indebted for the only word in their language (*tui*) for sewing, as their ancient garments were *pasted together, not sewn.* A house carefully covered with pandanus thatch will not need re-covering for ten or twelve years.

The terminal buds and flowers of the pandanus are commonly eaten by the inhabitants of the low coral islets. Cattle love to browse upon the leaves. In the New Hebrides the petticoat worn by women and girls is prepared from the exposed roots of the pandanus by splitting and *chewing* them.

The timber of the screw-pine, although poor, is used for house-building in all the low islands; and—on account of its being hollow—for piping in the high islands. The natives value the tree highly on account of the perfume yielded by the male inflorescence, used to scent cocoa-nut oil. The perfume is very powerful; to many Europeans it is very agreeable. The inner part of the drupe is cut off and threaded as necklaces, on account of the fragrance. When fresh, and alternated with the deep-red, bell-shaped coverings of the seed of the *puka*, the effect is very fantastic. Native songs abound with references to this perfume (*ara inano*, fragrant screw-pine).

The octopus, doubtless attracted by the fragrance, climbs up the screw-pine to feast upon the flowers. Bats are very partial to the fruit.[1]

[1] The following appeared in the *Leisure Hour* for January 3rd, 1880:—

The interior of this tree is filled with loose fibres, which soon decay.

When very old—and it is believed to attain to a great age—beautiful walking-sticks, etc., may be made out of the hard external part.

I have seen the veritable screw-pine on which Mautara, some hundred and fifty years ago, disembowelled Kikau in revenge for the murder of his son, Teuanuku. The tree was uprooted in the cyclone of 1866, or it might well have lived on for many a long year.

The male tree is much handsomer than the female, on account of its foliage being much denser.

The Mat-Tree of the Pacific.—Another species of

'Mr. W. Wyatt Gill, in his valuable and interesting book on the Pacific, *Life in the Southern Isles*, stated that the octopus occasionally climbed trees to eat the fruit. Mr. Henry Lee, F.Z.S., an authority on this class of animals, thought Mr. Gill must be mistaken in this statement, as no one had hinted at such a thing except old Aristotle. He asked Mr. Gill to make inquiry on returning to the Pacific. Mr. Gill has sent a letter fully confirming his previous statement, attested by many native eye-witnesses, students and missionaries, who had no object in inventing such a story. The tree is a species of pandanus, of which there are three representatives in the Hervey group of islands. The screw-pine (*Pandanus odoratissimus*) has scented flowers on the male tree and hard fruit on the female tree. It is for this flower that the octopus climbs, attracted probably by the scent. So Aristotle was right after all. It is notable how often his observations are verified by modern science and research. In a recent number of *Nature* is a paper by Professor Huxley "On Certain Errors respecting the Structure of the Heart attributed to Aristotle." In this paper Professor Huxley says of the *Historia Animalium:* "As a whole it is a most notable production, full of accurate information, and of extremely acute generalisation of the observations made by naturalists up to that time."'

Pandanus common throughout the Pacific is the *Pandanus utilis*, or mat-tree. The thatch-tree is never planted by the islanders; but the mat-tree is carefully cultivated. The former is propagated by the seeds dropping on the soil and germinating. The latter has neither flower nor fruit, and is propagated solely by means of shoots from the roots and lower parts of the stem. These young shoots are torn off and planted. The mat-tree sometimes attains the height of twenty feet, but is usually kept low by continual cropping for making mats.

The leaves of the *rauara* or mat-tree are distinguished from those of the thatch-tree by the entire absence of hooks on the edges and midrib.

Carpets would be intolerable in these islands, the thermometer standing at 90° in the shade. Besides, they would harbour insects, the plague of the tropics. But mats are always cool and clean. From time immemorial they have been plaited by women on old canoes turned upside down, on account of the round surface and convenient height. Out of the seven islands constituting the Hervey group, five practise mat-weaving. Of late years useful baskets and hats have been manufactured from the leaves of this tree. Oranges for exportation are wrapped up separately in the leaf of this valuable tree before packing in crates.

Only an experienced eye would distinguish the *Pandanus utilis* from the *Pandanus odoratissimus;* so much are they alike.

The Kiekie (*Freycinetia Banksii*).—On the mountains of Rarotonga freely grows the *kiekie*, a sort of miniature screw-pine, which in New Zealand,

Norfolk Island, and Rapa-iti,[1] bears a delicious fruit somewhat resembling the pine-apple. On no other island of the Hervey group is this tree found; and even here it never bears fruit. Its long grassy leaves are, like those of the *Pandanus odoratissimus*, armed with a triple row of tiny hooks. The *kiekie* scrambles up forest trees, and then jauntily hangs down from some lofty branch. It is sometimes forty feet in length, branching copiously. Sometimes it is a parasite. Its aerial roots possess great strength, and are used instead of cane for sofas and chairs. Hence the ancient Rarotongan boast, 'My hands are iron-wood and *kiekie*,' i.e. of matchless strength.

The Pua Tree.—The *pua* (*Fagræa Berteriana*) is one of the sacred trees of the Pacific. It attains the height of thirty feet. The lance-shaped leaves are remarkably fleshy and close together. The border of the tubular corolla is five-lobed, the fruit is a two-celled berry. It blossoms at the beginning of October; in the morning, when they open, the flowers are white, in the afternoon yellow. They last but a day, and are deliciously fragrant. When the flowers, or rather the corollas, have dropped on the ground, they are gathered and strung into necklaces, retaining their agreeable and powerful perfume long after they are dry. Sometimes these flowers are used instead of sandal-wood to scent cocoa-nut oil. The *pua* and the *gardenia* are *the* flowers of the Pacific, in the estimation of the islanders. On account of the colour of the fallen blossoms, *pua* has become the only name for *soap* amongst the Tahitian, Society, and Hervey Islanders. The wood is of very fine grain and of

[1] An island more than 1,000 miles south-east of Rarotonga.

light colour, being particularly adapted for plane-handles and for carving; it is almost imperishable. At Rarotonga a log of *pua* which had been submerged for about fifty years, on being taken out of the mud, and having a shaving or two taken off, appeared as fresh as when first cut down.

FAGRÆA BERTERIANA (FRUIT).

The main interest, however, in relation to this tree is its connection with the ancient faith of the South Sea Islanders, its long branches being regarded as the road by which the spirits of the dead descended to Hades. Two girls are said once to have quarrelled when gathering the flowers of this tree. A branch broke, and one of them falling with it, such was the

magical virtue of the tree that it cleft the earth, and the girl found herself with the broken branch in the under or spirit world, where she had a narrow escape from a race of cannibals resident there.

This was merely 'an incident;' but the classic faith of the Hervey Islanders was that at the appointed time an immense *pua* tree covered with fragrant blossoms was supposed to spring up from Hades. As soon as coward spirits, in obedience to a mysterious inward impulse, are clustered on the branches of this mystical tree, like bees attracted by sweet blossoms, the tree collapses, and the whole company of unhappy spirits are thereby shaken into Akaanga's fatal net in the nether world, to be eventually cooked and devoured by dread Miru, her four fair daughters, her dance-loving son, and her servants.

Not so the spirits of the brave. In the month of August, *i.e.*, when the coral-tree is covered with gorgeous red flowers, they ascend to the azure vault, where they float about clothed with garlands of all sorts of sweet-scented flowers, and dance over and over again their old war-dances, in remembrance of their achievements in life. The natural result of this faith was to breed an utter contempt of violent death.

The picture of the *pua* branch in fruit is from a drawing by Sydney Parkinson, the artist who accompanied Captain Cook in his first voyage round the world. It is copied from the original drawing in the British Museum by the kind permission of Dr. Carruthers.

The Candle-nut Tree.—One of the most graceful trees in these islands is the *tuitui*, or candle-nut tree (*Aleurites triloba*). Its silvery leaves finely contrast

with the darker tints of the forest. These leaves alternate, are from six to ten inches long,[1] and are either entire or else three or five lobed. From October to December the innumerable clusters of small white blossoms—male and female, growing together at the apex of the branches—present a most pleasing appearance. The candle-nut tree is very umbrageous, and sometimes attains to the height of sixty feet. It is occasionally twelve feet in girth. It is a stately, pleasant tree to look upon.

To a South Sea Islander this tree is most serviceable. The fruit is either one-celled or two-celled; in the former instance, it is two inches in diameter, and nearly round; in the latter it is somewhat larger and flatter. When ripe, the fruit is of an olive colour. In each cell is one seed encased in a very hard shell. These kernels, when ripe, furnish the islanders with light—indeed, the only light of the past in the Hervey group. From time immemorial it has been woman's work to go to the forest to collect the ripe fallen fruits. The thick outer covering is removed by the hand on the spot; at home the nuts are half cooked, or steamed in an oven; when taken out, the slightest tap of a stone cracks the hard shell, and the kernel comes out entire. It is almost impossible to get the kernel out uninjured without the application of heat. The midrib of a cocoa-nut leaflet is used to skewer some twenty-five or thirty of these kernels; two or three skewerfuls tied together with a strip of hibiscus bark give a capital light. Little wooden troughs are sometimes used for resting the lighted torch. It is woman's work to hold the

[1] An exceptionally large leaf lying before me is *sixteen* inches either way.

torch, and carefully tend it by knocking off from time to time the burnt black kernel. The smell of this torch is most disagreeable.

The native name of the tree and fruit—*tuitui*—means 'sewn-sewn,' in allusion to the piercing of the baked kernel with the midrib of the cocoa-nut frond for a torch.

The thick outer bark of the candle-nut tree is often scraped for the purpose of expressing a dark red liquid called *iri*, used for staining native cloth.

From the heavy fumes of the burning kernel is collected in a broken calabash held over the torch the fine lampblack used in tatooing. When mixed with *iri* it is a good substitute for black paint.

The green fruit is beaten up and thrown into the hole in which green bananas are buried for the purpose of ripening. This is done with a view of accelerating the process and improving the flavour, although it is very hard to understand *how*.

The Hervey Islanders were anciently much addicted to ball-throwing; proficients could keep seven or eight balls in the air at one time. The fruit of the candle-nut tree—shell and thick outer covering on—was invariably used for this pastime, on account of its roundness and convenient size. It was then named *pei*, or 'ball.'

This oily nut was often used as food in seasons of extreme scarcity. I have known many persons who, in the terrible famine which prevailed on Mangaia during Makitaka's supremacy (A.D. 1814), kept life together in this way. This unwholesome diet invariably produces a black ring round the eyes. I am partial to the half-ripe fruit; its taste is delicate, somewhat like

that of a walnut. If eaten in small quantities, and with salt, it is attended by no disagreeable effects.

The growth of this tree is extremely rapid. Nowadays the perishable timber is used for oil-troughs for the living and coffins for the dead. A valuable paint oil is expressed from the kernel of the candle-nut tree for exportation to Europe. The nuts themselves are largely exported for the same purpose.

Of yore the baked kernel of the *tuitui*, with grated cocoa-nut, was the approved bait in rat-hunting, in which old and young delighted.

Spending a week on Tauan, on the southern coast of New Guinea, in 1872, we had at first no evening light. I luckily, however, discovered two candle-nut trees laden with ripe nuts, which we at once utilised. The naked savage Papuans, who previously had no idea of the value of this tree, were not slow in imitating our example.

The Gigantic Chesnut of the Pacific.—Nothing can be more agreeable to the pedestrian in the hot season at Rarotonga than to sit at midday on the primitive stone seat invariably placed at the roots of ancient chesnut-trees. The chesnut (*Inocarpus edulis*) is known to the natives of the Hervey group as the *u*.[1] If undisturbed by the hand of man, it is apt to take entire possession of the best soil. It especially loves the banks of a stream. Laved by the mountain torrents, the roots are often so fantastically gnarled as to be worthy of the study of a painter. The delicate glossy leaves of spring (October) are of a pale green, in striking contrast to the thick dark leaves of the past season lying underneath. In the South Pacific

[1] The *ifi* of Samoa, and the *mape* of the Tahitian group.

only the banyan, caral, and *vi*[1] trees are deciduous; so that the islands are clothed with evergreen. The chesnut is speedily covered with a mass of tiny pale-yellow flowers, which continue to make their appearance—though more sparingly—until the end of April. The whole neighbourhood thus becomes redolent with the delicate odour.[2] As the young leaves mature, the old ones drop silently; so that by the end of the year the foliage is entirely new.

The chesnut of the Pacific is a very beautiful tree. Next to the cocoanut-palm, it is lord of the landscape. Rising ten or twelve feet without a branch, it often attains the height of sixty feet. The leaves alternate, are oblong, and sometimes are fourteen inches in length. The fruit hangs singly or in clusters of twos and threes from slender twigs, and occasionally from the trunk itself.[3] It is flat, irregularly shaped, and contains but one seed. When young and hot out of the oven, it is palatable and nutritious; but as the season advances it becomes hard and almost tasteless. A chesnut lying before me—pod included—is five inches by four, weighing eleven ounces. But to get at the seed a hatchet is required. A pupil of mine once chopped off the top of a finger in this process. The fibrous pod, from one-third to half an inch in thickness, must be removed ere the kernel is

[1] *Spondias dulces.*

[2] Captain Turpie, of the Mission bark, assures me that often, when four or five miles out at sea off the islands of this group at sunset, he has been delighted at the fragrance wafted by the land breeze. This would be from the blossoms of the chesnut, pandanus, orange, and citron trees.

[3] A famous event; anciently supposed to be a special mark of Divine favour.

cooked in the native oven. This seeming drawback enables the natives to store up the ripe nuts in pits, well-lined with leaves, against the season of scarcity. About three hundred nuts are required for one pit. They keep good until chesnuts are in season again. As the ripe nuts are very hard and difficult of digestion, it is customary to grate them, mix the pulp with cocoa-nut, and bake the whole as a pudding. In this way an excellent dish is furnished with little trouble. A man who has two or three pits of chesnuts, as many of *maî*, or sour bread-fruit paste, with a number of old cocoa-nuts, is well provided for against the season of scarcity (*i.e.*, the so-called winter of the tropics). In a word, the chesnut is one of the main supports of human life in the volcanic islands of the Pacific. It comes in season just before the bread-fruit; and at the end of August—long after the bread-fruit has disappeared—there are still ripe nuts on the trees. Underneath, the ground is covered with them. In colour the ripe nut is of a rich yellowish red.

The trunk of a fine chesnut-tree in my neighbourhood measures thirty-six feet in circumference. The natural inference would be a diameter of twelve feet. Such, however, is not the case. The heart of the tree is only two feet in diameter; whilst in every direction are slender shafts or buttresses—from one to two inches in thickness—projecting gracefully at the bottom some four or five feet from the trunk. There are few more interesting objects than a chesnut throwing aloft its mighty branches covered with the densest foliage, the vast weight supported only by a slender trunk running out into a number of plank-like shafts. In the recesses thus formed children love to play at

hide and seek. Some of these buttresses yield a musical sound when struck; so that in heathen times it was usual to beat them instead of gongs, in order to collect the population in the cool of the afternoon in the open air to rehearse their parts in the semi-dramatic performances of those days.

The sap of the *Inocarpus edulis* is blood-red. Its timber is soft and used only for burning coral lime.

Proprietorship in this useful tree varies. In some islands the owner of the soil claims the fruit, but usually it is free to all, being rarely planted. Thus, happily, *we* need no poor laws.

Old men delight to tell of those who in the cruel days of idolatry escaped from their cannibal foes by hiding in this tree. Sometimes it was the thick foliage that concealed them; at other times it was the hollow formed by the branching out of giant limbs at one point. In other stories collectors of ripe nuts, oblivious of danger, were surrounded and speared from beneath; men and nuts cooked in the same oven to furnish a meal for the murderers.

The gigantic chesnut of the Pacific attains to a great age. When greatly decayed, it renews its vigour by sending down into the soil roots from the perfect branches. In time a new trunk is thus formed *inside* the decayed one. Chesnuts are still bearing fruit on Mangaia which were planted by Amu, a chief who ruled that island four centuries ago. When very old the buttresses disappear, and so its distinctive appearance is lost. The axe and natural decay of the more exposed parts may account for this.

The leaf of the chesnut from time immemorial

furnished the extempore kite of native boys, large kites of native cloth being used by men alone.

The utu (*Barringtonia speciosa*) is one of the most magnificent trees of the tropics. It grows on all the volcanic islands of the Pacific and the Indian Archipelago. It attains the height of sixty feet, and is exceedingly umbrageous and far-spreading. Under its shade the elders of Rarotonga in past days were accustomed to discuss the news, or watch the pastimes of youth, or recite the history of the past.

No tree exceeds this in beauty of foliage and flower. In England I was often reminded of it by the magnolia. Its dark, glossy leaves—twenty-four inches by ten and a half inches—alternate and are obovate in form. Few sights are more striking than the gorgeous autumnal (September) tints of the old leaves, rich yellow with bright red spots, unless it be in the month of January to see the same tree covered with new foliage and adorned with large white flowers of exquisite beauty. These flowers—seven inches in diameter—grow in clusters, bursting out of the calyx like balls of snow. In the fully-expanded flower, out of four corolla-leaves, rise from three to four hundred stamens tipped with rose-pink and surmounted with golden anthers. Like most tropical flowers, this fragile beauty lasts but a day. For months together the ground is every morning strewn with what might easily be mistaken for painters' brushes, the flowers of the preceding day. The fruit is one-seeded, quadrilateral, and eight ounces in weight, the seed itself weighing only two ounces. When grated, this seed furnishes a powerful fish-poison, much used, which, singularly enough, does not in any degree render the fish unwholesome.

The trunk of the *Barringtonia speciosa* is often thirty feet in circumference. The timber is much used for canoes and other purposes, but is apt to be pierced by a species of *Eumenes*. The broad glossy leaf is commonly used by the natives in dressing wounds, instead of adhesive plaster.

At Mangaia the only name for 'heart' is that used for the fruit of this tree, on account of a supposed similarity of size and shape.

The Lemon Hibiscus-Tree of the South Sea Islands.—One of the most useful trees in the South Sea Islands is the *au*, or lemon hibiscus (*H. tiliaceus*). On all the volanic islands it grows most luxuriantly, attaining the height of thirty feet. At first it shoots up as straight as a reed, but as it becomes mature it bends to the earth and takes root again. In a few years the soil is covered with an almost impenetrable jungle, the hiding-place of the conquered in heathen times. A mass of *Hibiscus tiliaceus*, covered with flowers of a bright lemon-colour, from four to five inches in diameter, is a pleasing and beautiful sight.

These showy flowers are borne singly upon stalks towards the end of the branches. The leaves are round, just the size of a dinner-plate, and until recently were the only plates used by the Hervey Islanders. It was—and still is in some islands—the duty of the daughters to provide new leaves for each meal. In presenting hot food to a visitor, it is customary to wrap it up in one of these leaves. Nothing is more enjoyable at a picnic in the Pacific than to be thus served to a plentiful repast of fish, fowl, and vegetables.

The sap-wood of the lemon hibiscus is white and

worthless; the heart is of a very dark-green colour, and is as fragrant as rosewood when green. On account of its extreme lightness, it is used for floating ironwood, anchors, etc. On account of its crookedness and toughness, it is used for the stem, stern, and knees of boats and small vessels. It also furnishes excellent paddles for canoes, and rafters for native houses. Buried in the soil, the heartwood is almost imperishable. To this tree we are indebted for nearly all the firewood used for cooking in these islands. As *we* have no coal this is a matter of great importance. In *this* genial climate throughout the year *we* need no fire to warm ourselves.

The mucilaginous properties of this tree have given rise to numerous myths. The inner bark furnishes the South Sea Islanders with string and rope. Cordage for native-built vessels is thus easily provided. This fibre, however, is too 'short' to bear exportation to Europe.

For some years past the flowers of the lemon hibiscus, after being dried and pressed, have been exported from Tahiti to France, as a valuable external remedy.

A wiry man is said to be 'like the bark of the hibiscus' (*takiriau*)—*i.e.*, tough, not bulky, like the great worthless *buka-tea*, the native emblem for the fat man!

Perhaps the greatest blessing conferred upon these islanders by this tree is its power of renewing the fertility of the soil. Nothing exhausts the soil so speedily as yams or cotton. In ten or twelve years the soil is utterly impoverished. The native plan then is to allow it to be overrun with lemon hibiscus

bush. When the timber has become heavy, you may be sure the soil is perfectly renewed. The soil which once was dry and hard is now light and extremely rich.

An esculent variety of hibiscus (*H. esculentus*) is common throughout Western Polynesia, and is much valued by the natives. The well-known shoe-black plant (*H. Rosa sinensis*), with its gorgeous red flowers, is a native of the Hervey group. When out of blacking, I have often been glad to rub the petals over my shoes.

The Vi-Apple (*Spondias dulces*).—The only fruit-tree—properly so-called—indigenous to the Hervey group is the vi-apple. Oranges, mangoes, and pine-apples are plentiful; but they were introduced by the missionaries. The celebrated bread-fruit is, strictly speaking, a vegetable—a mainstay of human life.

The vi-apple is a beautiful spreading tree from forty to fifty feet in height. It is one of the only three indigenous trees which shed their leaves in the dry season or winter of the tropics. The other two are the coral (*Erythrina*) and banyan-trees.

The leaf of the vi-apple is pinnate, with a terminal leaflet. The flowers are small and whitish. The fruit hangs in clusters. It is of the average size of a russet apple; the crown of the fruit being smooth, without indentation. The colour of the unripe fruit is a bronze-green; when fully ripe it assumes a rich golden hue, and is aromatic. The skin is leathery. The flavour is agreeable—slightly acid. The drupe has a hard spiked core—large in proportion to the size of the fruit—containing several pear-shaped seeds.

The leaves are twenty inches in length. When very young and tender they are often eaten raw, the

taste being like that of sorrel. The fruit is regarded by the natives as a delicacy, and is invariably eaten before it is ripe, although known to be unwholesome. I prefer them stewed, when they are excellent, tasting just like Herefordshire cider apples, but without their roughness.

Grafting is unknown amongst the South Sea Islanders. Hence the vi-apple is propagated merely by seeds, and by planting lopped branches almost horizontally, as they do sugar-cane. The trunk of the vi-apple is often from three to four feet in diameter; but soft, and of little value as timber. In the Tahitian and Society groups vi-apples are so plentiful that hogs are allowed to fatten themselves upon the fallen fruit.

The Cocoa-nut Palm.—The cocoa-nut palm, with its crown of light feathery leaves springing out of a perfectly round stem at the height of some eighty or ninety feet from the ground, is one of the most striking features of tropical scenery. Its leaf is about eighteen feet in length. Narrow, sharp-pointed leaflets, three feet in length, are arranged alternately along the sides of the central footstalk. The midribs of the leaflets are composed of a tough woody fibre, the same as the hard part of the trunk; not herbaceous, like the footstalk of the leaf. Male and female flowers—small and white—are produced on the same spike, and are enclosed in a strong, tough, pointed spathe, on the bursting of which the contents look like large ripe grain fit for the sickle. In favourable situations there will be as many as twenty nuts on one bunch; and there will be from ten to fifteen bunches ripening at the same time. The possession of a cocoa-nut grove is a little fortune to a South Sea Islander.

This palm is indigenous to all the islands of the Pacific. The natives of hundreds of *atolls* would perish but for this tree, which covering them with verdure is the first indication of land. To the eye of the voyager these palms seem to grow out of the ocean; on nearer inspection they are found to spring out of sand, shingle, and broken coral. And yet this invaluable palm grows freely in the fine rich loam of the valleys and seaboard of fertile volcanic islands like Tahiti, Rarotonga, etc. On the red clay hill-sides of Mangaia, Atiu, etc., it will not grow at all.

Near the soil this palm swells out like an enormous bulb, sometimes *three feet* in diameter, tapering, however, as it rises, until at the crown it is only *nine inches.* It is well-known as a branchless palm; yet on Tutuila there is one with two crowns, and on the island of Saibai, on the southern coast of New Guinea, in the middle of the village, there is another with *three* crowns![1]

It was customary in heathen times to plant the growing nut at the full of the moon with appropriate prayers; the roundness of the moon prefiguring the large size to which the nut would hereafter attain! In the best soil the young tree will bear fruit in five years; in poor soil seven years. The cocoa-nut palm attains the age of from 180 to 200 years in well sheltered places. In extreme old age it still puts forth spathes, which, bursting, reveal flowers, but never yield fruit.

In germinating, the young shoot and roots find their way through the single 'eye' of the old cocoa-nut, a circumstance which escaped the notice of that

[1] A picture of this is given at p. 207 of *Life in the Southern Isles.*

careful observer, the Rev. W. Ellis. At first the young tree grows very rapidly; afterwards slowly. As each leaf drops off, a half-ring is made on the trunk, thus giving a clue to the age of the tree. As the leaves, which grow alternately, are renewed twice or thrice a year, and there are some twenty leaves on a full-grown tree at one time, it is possible to estimate the age of a tree by counting the rings.

No tree is more useful. Its timber is used in house-building throughout the Pacific. On the low coral islets the dwellings of the natives are built entirely of cocoa-nut and pandanus. Indeed, on the more productive islands, temporary erections are always thatched with plated cocoa-nut leaves. The leaflets are platted into mat-screens for the sides of their dwellings, which for the sake of coolness are open on all sides by day. Baskets, durable hats and fans, are made of these leaflets, after they have been singed over a fire to render them pliant. Excellent sun-shades are made by fishermen from green leaflets. Churches are covered inside with mats of cocoa-nut leaves, on which the congregation sit, each family having its own mat.

A green leaflet tied round the upper part of the left arm was, and in some islands still is, a mark of idolatrous *tapu*. On Niutao I watched the worshipper of a crooked post, in which his god was supposed to be enshrined, offering a sacred leaflet and three cocoa-nuts morning and evening. The extremity of a cocoa-nut leaf, consisting of ten or twelve leaflets, when cut off and bound with yellow sennit by the priest, constituted the fisherman's god on Mangaia. A similar device is used in a formal invitation of a chief to a feast, the

sacred sennit being of course omitted. These leaflets are inserted in the thatch of the chief's house by the messenger, but no word is uttered. All *tapu* restrictions are still intimated by pinning to the soil or hanging on a tree an entire cocoa-nut leaf platted after a fashion supposed to represent the proprietor clutching the soil. All plants attached to that cocoa-nut leaf become sacred. This is called a *rāui*.

With the wire-like midrib of the green leaflets candle-nuts are skewered for torches. Excellent brooms are made of bunches of the same. The green midrib is invariably used in 'sewing' thatch on reeds. The footstalk (*aa*) is used as a pole on the shoulder in conveying food from the plantations. The fibrous network (*kaka*) by which the base of the immense leaves are in part attached to the trunk was used as clothing by the early male converts. I once saw a man wearing a suit of such clothes. It is obtained in pieces two or three feet in length and a foot wide. It is still used for straining expressed oil; also in the preparation of arrowroot. It serves too as a wrapper for fish-nets and other articles of value.

The dry spathe (three and a half feet long), or *roro*, split into shreds, furnishes the torch used by women in fishing on the reef at night.

When a cocoa-nut tree is felled for its timber, the crown is usually eaten. A French commandant on Lifu was in the habit of having cocoa-nut trees cut down daily to furnish salad for his soldiers. This is a common resource of the natives in times of famine. In small quantities the crown is very tasty.

The islanders carefully peel off the tender skin of the midrib of the unopened leaf, which is white and

glossy like the finest silk gauze. Cut into slips and tied together into plumes, it forms a most graceful head-dress; but, alas! to-morrow it is faded.

The husk of the cocoa-nut furnishes the islanders with a coarse fibre, which, when twisted into string (*kaa*), secures the thatch to the small rafters of their dwellings. To remove the woody particles, it is buried for a number of months in the mud of a taro-patch, when they are easily shaken out by the hand. The finer fibre of the half-grown nut is platted into sennit for the hafting of adzes, for 'sewing together' the different pieces of their canoes (which are rarely made of one tree), for securing the outrigger of their canoes, for adorning the houses of the chiefs, and (in former days) for the ornamentation of their gods. On Mangaia there was a god made entirely of sennit, named Mokoiro.

The fibre, or coir, exported to Europe is an important trade; little of it, however, comes from the Pacific. In Europe this fibre is manufactured into ships' cables, matting for churches and private dwellings, brooms, brushes, and stuffing for cushions and mattresses. The hard shell of the cocoa-nut furnishes the islanders with drinking cups not easily broken, and calabashes often holding a quart of water apiece; at home the shell is converted by the turner into various tasteful ornaments.

The kernel furnishes the natives with food; the *water* with a delicious drink. In England this liquid is misnamed 'milk.' Many of the high chiefs of Polynesia formerly never tasted any other drink. On the hottest day a hearty draught of cocoa-nut water is harmless. To Europeans it is injurious after sunset.

Infants and the dying are fed with the scarcely-formed kernel of the very young nut, which is the consistency of cream. The half-grown nut is freely eaten by adults. Old nuts are used chiefly to fatten pigs and poultry. Great quantities of cocoa-nut oil were formerly made from the kernel and exported to Europe. Now the dried kernel itself, under the name of *copra*, takes the place of the oil, and has already become an important article of commerce. The oil expressed in Europe from the *copra* is consumed in the manufacture of candles, soap, scented oil, pomatum, etc. The refuse is used for fattening cattle and pigs.

In the low coral islands it is usual for the natives to plant a couple of hundreds of old cocoa-nuts in parallel rows near the hut for food. The soft white pith of the growing nut is delicious. On a native pastor's table I saw what I took to be a dish of roasted potatoes swimming in gravy. It proved to be merely a number of baked *uto*, or growing kernels. The natives around ate them all, and literally drank up the pure oil! All native vegetables are at times mixed with scraped cocoa-nut and baked. In this way the 'puddings' mentioned by the early voyagers were prepared. Natives love to put to a new-comer the question, 'What is the prince of all food?' Cocoa-nut is universally allowed to be 'the prince.'

The smallest cocoa-nuts I have seen grew on Lifu; the largest on Bampton Island, at the entrance to the Fly River in New Guinea. Those on Manuâ (Samoa) are remarkably fine. The cocoa palm does not flourish at a distance from the ocean, the salt air being necessary to its full perfection.

A dwarf variety sparingly found on most of the

islands (called *nu mangaro*, i.e., pleasantly-tasted nut) is chiefly eaten by invalids. Its peculiarity is this: on removing the thin outer covering of the green nut, the husk and shell, as well as the kernel, may be eaten.

In times of scarcity thieves avail themselves of their knowledge that it is possible to husk a cocoa-nut and pierce the eyelet on the hard point of the unopened spathe which protects the future flower and fruit.

Occasionally the cocoa-nut water of a tree whose roots are laved by the sea is too saline to be drunk.

For days after a cyclone it is highly dangerous to pass under a cocoa-nut palm, as the green nuts, loosened by the wind, are continually dropping.

Now and then may be seen a tree laden with great numbers of small long nuts (*nu vaao*). The shells—their ends rubbed off on madrepore coral—formed the ear-ornaments of the Hervey Islanders in heathenism. Filled with fragrant flowers and leaves, they were worn in the slit lobes—greatly distended by use—of the ears of persons of distinction.

No ladders were ever used in the Pacific for the gathering of cocoa-nuts. A strip of green hibiscus bark is tied round the ankles of the climber, who, resting alternately on his knees and ankles, speedily climbs the tallest tree with safety. The imperfect rings on the trunk alone make this feat practicable when the tree is perpendicular by preventing the feet from slipping. Occasionally an accident occurs from trusting the weight of the body to a leaf partly detached, on entering the crown to pluck the nuts. When a tree is at an angle of 45°, lads will literally run up the trunk!

In the Kingsmill, Marquesas, and some other

groups, toddy is prepared by slicing off the spathe and collecting the sap morning and evening in a calabash suspended underneath. At first this liquid has the appearance and taste of molasses; allowed to ferment, it becomes highly intoxicating. Of course no fruit is borne by toddy trees. Wherever Christianity has been accepted, this practice has been abandoned. Toddy trees are notched, to enable the collectors of it to *walk up*, of course assisted by their hands.

In some islands near the line, where rain rarely falls, holes are dug in the under side of bending trees for the purpose of collecting rain-water. Strange to say, the tree is none the less fruitful on account of the deep gash.

This palm has many foes. The cyclone often destroys it by twisting its tender leaves, or by driving ocean-spray like heavy rain on the delicate crown of trees growing near the sea. Worst of all, the *Phasma*, or spectre insect, is apt to attack it at all seasons.

These islanders anciently believed that the two varieties of the unripe cocoa-nut, viz., the reddish and the deep-green, sprang from the two halves of the brain of the god Tuna (=fresh-watereel.) They still speak of 'tasting the brains of Tuna.' Red nuts were sacred to Tangaroa, the god of heaven; deep-green nuts to Rongo, the god of nether world.

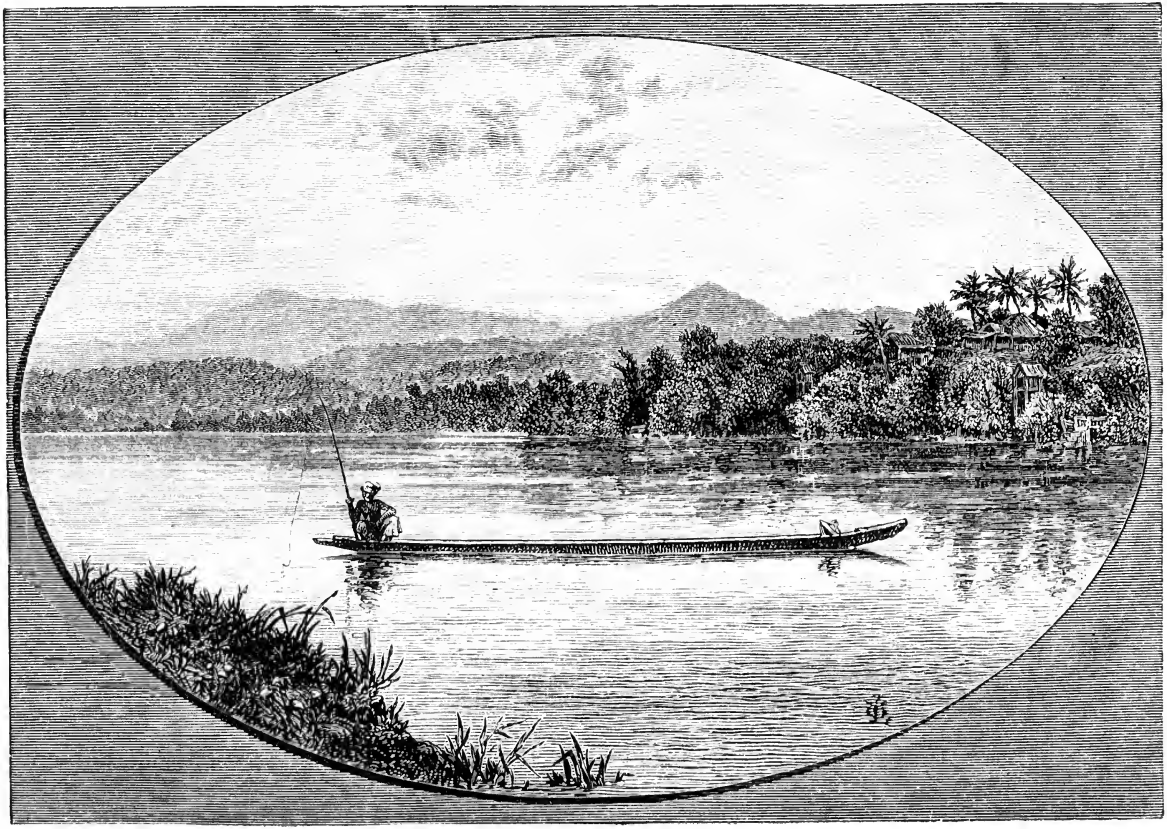
The porcupine wood imported into England for ornamental joinery is merely the lower part of the stem of the cocoa-nut palm. It is very hard, and takes a beautiful polish. The clubs and spears of the low coral islanders were invariably made of it.

A few other palms are found in the Pacific. On Espiritu Santo grows a palm (*Areca*), in appearance

just like the cocoa-nut, but yielding only berries. Its leaflets are used for thatch. The ivory plant (one of the palm tribe) grows freely in the Solomon Islands. A considerable amount of vegetable ivory is imported to Sydney from that group, realising £50 per ton. From Rotumah on to New Guinea grows the sago palm of commerce. On the coral island of Mitiaro in the Hervey group, and on Savage Island, Vavau, etc., is found the *giao*, a beautiful species of fan palm, with a perfectly smooth stem and great undivided leaf.

PART IV.

MISCELLANEA.



A SOLITARY FISHER. SOUTH SEAS.

Miscellanea.

Statues or Stone-gods of Easter Island.—Two most interesting chapters in Cook's *Voyayes* relate to Rapa-Nui, or Easter Island. This solitary island is famed for gigantic statues, some placed in groups on well-built *maraes;*[1] others single, fixed in the earth. These statues are cut out of solid grey stone. On the heads of some of them are stone *pare,* or crowns of a red colour. One of the smaller statues may be seen in the British Museum.

In showing the sketch of Ronoraraka cave, [see frontispiece] with its monster statues, to an Eastern Islander, it was at once recognised. He assures me that these statues have not been worshipped within the memory of any now living; that the idols actually worshipped, until lately, are the small wooden representations of the human form which I have often seen. His account of these famous statues, as received from the old men of the past, is romantic:—

Long, long ago, there lived on Rapa-Nui a famous artisan named Tukoio. He was also a magician. His sole delight was to carve in stone. His tools were

[1] The gigantic statue of Rongo at Mangaia was set up in the *marae* sacred to that god facing the sea.

merely sharp stone adzes like those now in existence, only larger and stronger. When any of these statues were completed, Tukoio would order them to travel to the sites where they now are. They at once obeyed; but on their way some of them, having had the misfortune to stumble and fall, were never able to rise again. The office assigned to these gods was to guard the island against the intrusion of strangers and the violence of the ocean. To this day they are known collectively as 'the Stones of Tukoio' (*Moai na Tukoio*). Each statue has also a separate name. Tukoio was deified after his death, on account of his wondrous skill and might.

Captain Cook says they sometimes prefix the word *moi*, which signifies 'burying,' or 'sleeping-place,' to the different names of these statues. The Captain has evidently confounded the word *moai* (=Tahitian *ofai*), which signifies 'stone,' with *moe*, the universal Polynesian word for 'sleep.'

If these statues were merely the guardian gods of Rapa-Nui, no special worship or offerings would be required. At Mangaia the entire belt of sandstone (*kea*) was regarded as a divine protector against the irruptions of the ocean, and yet never received distinct worship.

The wooden idols recently worshipped by the Eastern Islanders are male and female. One now lying before me—22 inches by 5½—is well carved; the pupils of the eyes are of black obsidian, the iris of fish-bone, and the hair of a decidedly Egyptian style. Certainly the contour gives support to the theory of my friend Mr. Park Harrison, whose papers on Easter Island hieroglyphics deserve careful attention.

The population of Easter Island is now about 200; *i.e.*, one third of the number previous to the atrocious Peruvian kidnapping of 1862.

Obsidian is abundant on Easter Island. It was anciently used with deadly effect for pointing their weapons.

Disappearance of Islands.—In Lady Brassey's charming *Voyage in the Sunbeam*, the following passage occurs (page 238): 'That islands do occasionally disappear entirely in these parts (*i.e.*, South Pacific), there can be little doubt. The Tahitian schooners were formerly in the habit of trading with a small island close to Rarotonga, whose name I forget; but about four years ago, when proceeding thither with the usual three-monthly cargo of provisions, prints, etc., they failed to find the island, of which no trace has since been seen. Two missionaries from Rarotonga are believed to have been on it at the time of its disappearance, and to have shared its mysterious fate.' There is not an atom of truth in this story, which is the invention of some very lively imagination. During a residence of upwards of thirty years in the Pacific I have not heard of the disappearance of a single island. No doubt in some other parts of the world, where volcanoes are active, such events may have taken place.

Moonstruck.—'The sun shall not smite thee by day, nor the moon by night.' This beautiful verse expresses the belief, common in ancient days, that the moon exercises a baleful influence upon those exposed to her direct rays. In modern times, the pernicious influence of the moon has been doubted and even denied.

But whatever the influence of the moon in the temperate zones, within the tropics it is very injurious to sleep exposed to its rays, especially when at the full. On a voyage to the Antipodes, when near the line, a Maltese sailor, who was a most comical fellow, slept for some hours on the boom with his face towards the full moon. On awaking in the morning, the muscles on the right side of his face were contracted, so that every attempt to speak was attended with the most ludicrous contortions. Feeling sure that something was seriously wrong, he spoke to another sailor, who, supposing that as usual he was at his odd tricks, burst out into laughter. Off he went to another, with exactly the same result. The poor fellow now got into a rage, thereby adding not a little to the ludicrousness of the scene. After awhile the truth dawned upon the captain and officers of the vessel. The doctor gave him some medicine, the muscles gradually relaxed, and in the course of a week our Maltese friend was well again. On one occasion, when sailing from Tahiti to Mangaia, a little boy of mine, in perfect health, was thoughtlessly placed by his nurse in his berth, the slanting beams of the moon falling on his face. Next morning he was feverish and ill, and it was two or three days before he was himself again. On the island of Aitutaki, a native woman was watching night after night for the return of her husband from the island of Atiu. Whilst doing so one night she fell asleep, the moon's rays pouring upon her face. On awaking she felt ill, and her eyes were drawn on one side. Considerable interest was felt by the islanders in her case. Eventually, however, her eyes were restored. These facts illustrate the injury done

to human beings by the moon in the tropics. Yet I never heard of insanity or death resulting from this cause. It is well known, however, in tropical countries that the moon's rays occasion the rapid decomposition of flesh and fish. A number of bonitas having been caught one evening near the line by a friend of mine, the spoil was hung up in the rigging of the ship, and was thus exposed to the moon through the night. Next morning it was cooked for breakfast. Symptoms of poisoning were soon exhibited by all who partook of it—their heads swelling to a great size, etc. Emetics were promptly administered, and happily no one died. The natives of the South Pacific are careful never to expose fish (a constant article of diet in many islands) to the moon's rays by any chance. They often sleep by the sea-shore after fishing; but never with the face uncovered. The aboriginals of Australia do the same as well as they can with their fishing-nets, etc. A fire answers the same purpose. May not the injurious influence of the moon (in addition to her beauty and utility) account for the almost universal worship of that orb throughout the heathen world?

South Sea Island Riddles.—The propounding and solving of riddles is a pleasant pastime for young people at home on long winter evenings. In the South Pacific it has been from time immemorial the serious employment of bearded and even grey-headed men. In the following brief collection many are obviously modern, but others are undoubtedly ancient.

1. Who is so strong as to be in the habit of carrying about with him a stone house?

The hermit crab.

2. What is that which when deprived of its roots

is covered with leaves, but when the roots are grown the roots die?

A ship; the sails being the leaves, the chain and anchor representing the roots.

3. What exceeds all other things in swiftness?

Thought.

4. A band of warriors fighting unweariedly day and night?

Billows dashing against the reef.

5. A child so full of love to its parent that it carries all sorts of things, even the largest and heaviest, as gifts on their day of meeting?

The mountain torrent, after a heavy rain, meeting the ocean.

6. Who has a body through which you can see the contents of his stomach?

A fish-trap.

7. Who is the strongest of servants?

Fire.

8. Who in summer feeds with a grating noise and discharges his food through the mouth?

The shell with which bread-fruit is scraped previous to baking. The base being removed, the shell cuts like a sharp knife. There is no bread-fruit in winter.

9. Who is always shutting the door of his house?

The eye.

10. What food furnishes its own relish?

Taro; the tuber is a mainstay of human life, whilst the cooked leaf, which tastes like spinach, is the relish.

11. What plant has only one root and one leaf?

A kite; often made out of a single gigantic chesnut leaf. The tail represents the root.

12. Who carries food inside a trough, but when it has abundance casts aside the trough?

The banana; the deep-red covering of the young fruit drops off when mature.

13. What food is abundant one moment, and scarce the next moment?

The urchin-fish, which sullenly collapses.

14. Who with a black skin is ever clothed in purest white?

A species of tern, common in the Pacific.

15. Who in childhood is content with green clothes, but in its old age gets proud and puts on yellow garments, and finally goes to the length of wearing a red shirt (the acme of a native's pride)?

The winter cherry; the fruit of which is first green, then yellow, and eventually a bright red.

16. Who shows his joy behind?

A dog wagging his tail.

17. What fire is the hardest to put out?

Thought.

18. What has two tails, no head, but its stomach is ever gaping for more food?

An oil-sling. The oil is expressed by twisting the sling in opposite directions by means of two strong sticks.

19. What messenger is that which, when sent on a journey, never returns to its master unless fetched?

A reed thrown in a reed-throwing match.

20. Who is first stripped of his white shirt, and then turned naked out of doors?

Ginned cotton; the seed being usually thrown in a heap outside.

21. Whose cap is stolen from him by mother earth?

The aerial roots of the pandanus; the cup-like spongiole at the extremity of each drops off as soon as it touches the soil.

22. A warrior whose body bristles all over with spears?

The urchin-fish.

23. Who shouts all day and night?

The surf on the reef.

24. Who is sure to dance when the wind blows?

Leaves.

25. What good thing has leaves above and below?

A pine-apple.

26. What country of right belonging to a black race is eventually conquered by the whites?

The head, which is first black, but eventually becomes white. It should be borne in mind that these islanders have black hair, and a bald pate is the greatest rarity.

27. What grows head downwards, tail upwards?

The plantain. In the native language what we term 'the top' of the fruit is 'the tail,' the lower part growing out of the stalk being 'the head.'

28. What red mother gives birth to a black child?

The *turinä* or the laurel-like *Hernandia peltata*. Each of its bare black seeds has a deep-red fleshy covering hanging over it like a bell.

29. What beats a drum at one end and dances at the other?

A dog barking and wagging his tail for joy.

30. What fellow has eyes on his back and a mouth on one side?

A sole.

31. Who is provided with a pair of eyes and legs, and yet has no body?

A pair of spectacles.

32. Who wears a red shirt outside, a white shirt inside, and a black cap?

A leguminous plant called *Abrus precatorius*. The seeds are of a bright red colour, with a spot of jet-black at the top.

33. Who vomits all he eats?

An auger or gimlet.

34. A monster of many eyes which occasionally devours alive a whole village?

A Rarotongan church with its numerous windows.

35. Who stands outside day and night, in the rain and wind, without lifting his head? And well the head may hang down, for it is sure to be decapitated.

A banana-tree laden with fruit.

36. What natives of Rarotonga have most reason to be proud?

The cock and the turtle; the former because he rouses the queen from sleep every morning, the latter because royalty alone partakes of his flesh. The palm must be awarded to the turtle, because *now* cocks are owned by common people and awaken *them* too; whereas to this day no ordinary native dares eat turtle. To be an eater of turtle is to be a big chief.

The Sea-horse.—Two natives of Fate, one of the southern New Hebrides, on the occasion of their baptism gave up to the teacher, who was named Toma, their gods. These gods, to which daily worship had long been offered, were simply dried sea-horses. Who has not admired the graceful movements of the hippocampus in the Brighton and other aquariums?

When alive it can neither benefit nor harm any one, much less when dead. But so strong is the instinct of worship in the human heart, that it will seek out some object, however absurd, on which to trust. A man will not worship his neighbour's god, as it is supposed that that divinity will have enough to do to take care of *him*. He wants a god all to himself. Thus is 'their foolish heart darkened.' One of these sea-horses is still in my possession; the other I presented to the well-known naturalist, Henry Lee, Esq.

Reckoning by Nights.—Polynesians invariably counted by *nights*, not by days. The reason assigned for this practice is, that one day (*ra* = sun) is like another, whereas each night gives a different phase of the moon with a distinct name. The phase of the moon also indicates the sort of fish obtainable. Something perhaps may be put down to their habit when voyaging of steering by the stars, visible (of course) only by night. Latterly, as taught by missionaries, day-counting has come into vogue; but this is a novelty. Strangely enough, in a recent publication of great research on Polynesian antiquities a table is given of 'Names of the *days* in the month,' followed by the names of the *phases of the moon* in the Society, Marquesan, and Hawaiian groups!

Prayer upon the Extraction of a Child's Tooth.—Formerly used at Rarotonga.

Kiore roa! Kiore poto!	Big rat! Little rat!
Ina! te nio kino noou.	Here is my old tooth.
Omai i te nio meitaki noku.	Pray give me a new one.

When this prayer was finished and the tooth out, the old tooth was thrown on the thatch of the house, as

rats make their nests in decayed thatch. The motive for invoking the rat was, rats' teeth were the strongest they were acquainted with.

Fish Diet.—I am interested in the discussion going on at home about fish as food for the brain. For years past there have been annually resident in the training institution at Rarotonga from 50 to 70 natives of various islands of the South Pacific. The most quick-witted students come from low coral islands, and have grown to manhood on a diet of fish and cocoa-nuts. In muscular strength, however, and in the power of endurance, they are decidedly inferior to the inhabitants of volcanic islands, who used a mixed diet.

Stone Adzes in the Pacific.—The adzes of the Hervey Islanders are frequently hafted with carved *pua* wood. The carving, which is often admirable, was formerly executed with sharks' teeth, and was primarily intended for the adorning of their gods. The fine-pointed pattern is known as 'the sharks' teeth pattern' (*nio mango*). Other figures are each supposed, by a stretch of imagination, to represent a man squatting down (*tikitiki tangata*). Some patterns are of recent introduction, and, being mere imitations of European designs, are destitute of the significations which invariably attached to ancient Polynesian carving. The large square holes are known as 'eel-borings' (*ai tuna*); the lateral openings are naturally enough called 'clefts' (*kavava*). To carve was the employment of sacred men. The national gods of Mangaia, with one exception, were carved in ironwood by one man, Rori, who was believed to have been specially assisted by the gods for the purpose. The idols were called 'carvings' (*tiki* in the Hervey group, *tii* in the Tahitian and Society groups).

The stone adzes were secured to their wooden hafts by means of fine sinnet, itself esteemed divine. It was fabled that the peculiar way in which the natives of Mangaia fasten their axes was originally taught them by the gods. A famous god, named Tane-mataariki, *i.e.*, Tane-of-royal-face, was considered to be enshrined in a sacred triple axe, which symbolised the three priestly families on the island, without whose aid the gods could not be acceptably worshipped. Tane-of-royal-face was one of the very few much-respected gods *not* surrendered to the missionaries, but hidden in caves. All trace of this interesting relic of heathen antiquity is now lost. The shape of a god-adze differed *at the back* from those used by artisans in being rounded underneath. These artisans were priests; to use an adze was to be a man of consequence, the skill necessary in using it being invariably referred back to the gods as its source. That the Rev. J. Williams should be able to fell a tree and build a vessel as well as to preach and teach was in perfect harmony with their traditional ideas of a priest-chief. The improved art of carving and plaiting sinnet, etc., was long ago introduced from Tahiti by a worshipper of Tane. During these employments songs were chanted in a soft low tone to the gods to aid their work. Some of these stone adzes were intended for despatching their foes. Stone adzes are invariably used *laterally*, not perpendicularly as our steel ones. Beds of stone adzes are occasionally discovered. They generally consist of about a dozen adzes, large and small, arranged in a circle, the points being towards the centre. This 'treasure-trove' would have been the property of some family exterminated in war. The knowledge of the localities

where to find them was of course carefully handed down from one generation to another until the last of the tribe was gone.

A Heathen's Idea of Prayer.—Tangirā, a heathen from Tongareva, spent some time with us on Mangaia. When at length an opportunity for him to return occurred, I accompanied him to the outer edge of the reef, and, as he got into the canoe, said to him, 'I shall pray for you, Tangirā.' The poor heathen trembled violently from head to foot, and asked me, 'What harm have I ever done to you that you should pray for me?' His idea of prayer was for the destruction of an enemy. Tangirā went to his distant home, and, finding his aged father dead, in a midnight raid murdered seventeen of his countrymen, for having, as he imagined, bewitched the poor old man. Such is the blindness of the heathen.

From the Coral Reef to Heaven.—Moanakino and two companions went fishing on the coral reef. It was a lovely day. They had been fishing some time with good success, and were just saying to each other that they would return home, when two of their number unfortunately found that their fish-hooks were caught in the coral in rather deep water. In those days the natives set great value on their fish-hooks. As the sea was tolerably smooth they dived for them, the usual practice of fishermen under such circumstances; but, alas, they had scarcely left the reef, when suddenly a breeze sprung up and immediately the sea became very rough. They tried to return to the reef, but they were continually baffled in their attempts by the surf, which was running very high and dashing with great force against the sharp shelving coral. Their friend ashore

on the reef could do but little for them. He held out his long fishing-rod, a bamboo cane, for them to catch hold of; but, alas! it was too short. There was no canoe near, but he immediately ran off for one. An hour elapsed ere the canoe arrived. In the meantime one of the poor fellows in the ocean complained that he was getting weak and very cold. His friend tried to hold him up by his arm. After a time poor Moanakino, fearing his friend's strength might also fail, said, 'Let us pray together to God for help; but if He should see fit to take us to Himself, we will say, Thy will be done.' When their prayer was concluded, Moanakino said, 'I must die. I have no sensation in any of my limbs. Now leave your hold of me, for fear you also should sink. Farewell, I am going to Jesus and to heaven.' His friend continued holding on to his hair as long as he could, and for some time after he was dead. The body at length sunk to the coral bottom. When the canoe arrived several men dived for Moanakino's body, which they obtained with considerable difficulty. I tried every means I could think of to restore animation, but to no purpose. Moanakino was a young man of great promise, and left a young widow. Poor thing! she was standing on the reef tearing her hair when her husband's lifeless body was brought on shore. 'Blessed are the dead who die in the Lord.'

Intended Human Sacrifices.—The peace-offering to Rongo upon the accession of Pangemiro to the supreme temporal chieftainship (*circa* 1813) was Teata. On his second election to the same dignity he was anxious to obtain the only daughter of Teata for the altar. The only difficulty in the way was, Terango was a secondary wife to Vaangaru, a person of

distinction in those days. A private message to the husband secured his consent, for the consideration of some taro patches. Next day at noon a party of armed men made their appearance at the house of Vaangaru, at the moment when this ill-used wife was opening her oven, and taking out the steaming taro and fish for their meal. Hearing footsteps, she turned round, and saw the supreme chief of Mangaia and his brother Kino, with their armed followers. She at once guessed their errand; for had not these same parties, seven years before, offered up her father? Had not her remote ancestors perished after the same fashion? She stopped her work, tears falling fast upon the food she had just taken out of the oven. She was well aware that the killing party would not dare enter the premises of her husband without permission. According to the unvarying custom of native women expecting death, she carefully arrayed herself in her smartest petticoat and *tiputa*. In all probability the cloth had been expressly made for the purpose, and laid aside until required. She now came out of the house to meet her doom, without uttering a lament. She had, indeed, abundant reason for lamentation; for she was young, and a mother. Yet her unworthy husband could look on apparently unmoved.

Yet, strange to relate, Kino pitied her; and, whispering to the great chief that he should prefer to look out for some other offering, took up his spear and led the party back. Terango lived; and no thanks to her husband, who thought he could well afford to part with so plain a wife, seeing that he had two others.

Terango's little son Arapoiri, was soon after sought in sacrifice, in lieu of the mother—not, however, by

the chiefs. A nephew of Vaangaru, who happened to be on the losing side in the last battle, and who therefore had lost his lands, was extremely anxious to ingratiate himself into the favour of the chiefs. The best way to do this was to provide them with an unexceptional sacrifice. That sacrifice should be Arapoiri; for at birth he had been dedicated to Utakea, as his mother and grandfather had been. It was well known, however, that Vaangaru would never willingly give up his child, so that craft must be employed.

This promising nephew of Vaangaru prepared a little feast, carefully dividing it out to all his relatives, including the father of the intended victim, who was not present. All being in good humour, he unfolded his notable device for getting back their lands, and wound up by requesting Akaare at sunset to entice their young relative, Arapoiri, to their house. But Akaare flatly refused to do so, as they were all dependent upon Vaangaru for protection and food; and he even gave the father of the boy a hint of what was in contemplation.

It had been planned that the child should be killed by stealth, and under cover of darkness be that very night conveyed to the chiefs, to be by them laid on the altar. Vaangaru, alive to the danger, was on the alert that evening. But it is no easy thing to keep a young child still; and should he but run outside the hut, he might be carried off and slain. To prevent this, Vaangaru unwound his head-dress of strong sinnet, and tied the little fellow to his own leg. The youngster by no means approved of this proceeding, and cried himself to sleep. As the night wore on the father felt drowsy himself. Thinking that his boy might easily

be stolen from his side, he sought for some effectual method of concealment. A bright idea occurred to the father: a long *tamanu* (*Calophyllum inophyllum*) trough, still preserved, was there inverted. Vaangaru hid the sleeping child underneath, taking care to raise one end of it, to enable the child to breathe. This inverted wooden trough constituted the anxious father's pillow that night. Firmly grasping his spear in both his hands, he dozed uneasily, feeling sure that if the child's hiding-place were discovered he could not be carried off without rousing him. Woe betide the man who should attempt this!

Many days elapsed ere Arapoiri was allowed to leave his father's side. Had he been left to the care of the mother, there would have been no scruple in killing him, as she herself was eligible for sacrifice. The true reason why the boy eventually survived was, that Reonatia was shortly after slain by direction of th chiefs, and his body laid on the altar. Terango died not long after the introduction of the Gospel to this island. The little boy, so cleverly hidden under the trough, grew up to manhood, and became well versed in the Bible. He was still living in 1872, and has been for years past a member of the Church at his native village. Had Akaare agreed to the proposition of his friends, the boy must have perished. It was from Akaare I first heard the story. The good old man loved to tell it, to convince the young how great a change had been produced by the Gospel of Peace.

In allusion to Vaangaru's giving up his dependants, and even a secondary wife, his old mother said, *E pa kikau ngaengae koe, e taû ariki:* 'Thou art no better protection than a roof thatched with cocoa-nut

leaves,' which freely admits the rain. Whereas a chief who protects all under his 'shadow' is compared to 'a house thatched with pandanus leaves' (*are-rau-maru*); not a drop of rain can enter. It is beautifully said that God is 'a well-thatched house' to all who love Him: all other hopes being, like Vaangaru, *e pa kikau ngaengae*—a worthless screen of cocoa-nut leaves.

Makitaka's Human Sacrifices to Rongo.—In the latter part of 1854 died, trusting in Jesus, one of the oldest Church members at Tamarua, where our first years of missionary life were spent. Vaere,—that was his name—was carried off by the measles, an epidemic peculiarly fatal to Polynesians, which had unfortunately been introduced here from one of the neighbouring islands. I was sorry to lose Vaere; for his snowy locks, his marked energy of character, his cheerful assistance in all Church work, his animated addresses at our Friday meetings, made him a man of mark amongst us. And this despite the fact that, through the ill-fortune of heathen warfare, he, in common with most of his tribe (Mautara), had been dispossessed of their lands, and consequently had lost their political consequence.

His father, Makitaka, the last priest of Motoro, was a man of great power in his day, as the supposed mouth-piece of that god. His commands in the name of Motoro were invariably obeyed. No slavery was ever half so hard as the cruel bondage of heathenism.

Makitaka, wishing to imitate the conduct of Mautara, the originator of his tribe, resolved to be not only the mouth-piece of Motoro, but also 'temporal sovereign' of Mangaia. With the willing aid of his friends, he

succeeded in breaking up the rule of Koroa, by the slaughter of Ikakona. This provoked the battle of Rangiura, in which Koroa's party was worsted. This was the second modern instance in which this once all-powerful tribe was divided into two hostile parties, and brother fought against brother. Makitaka heeded not the severing of kindred; it was, he asserted, the will of the gods. He attained the coveted honour. He was solemnly declared to be 'temporal chief' of Mangaia; a dignity which he retained scarcely three years.

To secure peace, two special sacrifices were made to the insatiable Rongo, as the supreme ruler of human destinies and god of war. Both were young women. The first was Ketetakiri, who was contemptuously designated, *ei ika aua na Papa*, i.e., 'fish refuse thrown to Papa,' the mythical mother of dread Rongo. The second was to be, *ei ika akatangi pau*, i.e., 'a fish, in order that the drum of peace might sound.' Usually, one sacrifice was deemed sufficient; Makitaka decreed two.

About a mile from Makitaka's house at Tamarua lived a poor young woman named Taike, belonging to the tribe of Teipe, long devoted by the priests to the furnishing of the needful human sacrifices. But the family was under the protection of a powerful warrior-chief named Vaangaru, whose consent must be gained ere she could be slain. Permission was readily, though secretly given, lest Taike should hide herself in the rocks, and so escape. Next morning, at dawn, a party of armed men hid themselves in the hibiscus bush, not far from her dwelling, at the head of the valley. The spot is one of quiet beauty. Behind, is

the narrow gorge running up to the central hill of the island. Through it meanders a stream, which, after fertilizing the multitudinous taro patches, runs into the sea under the rocks which encircle the island.

It was a time of great scarcity; foreshadowing the awful famine soon to prevail all over the island. Taike set off with her cousin, a girl about her own age, to collect an edible wild plant having a bitter taste, called *poro* (*Solanum nigrum*). It was raining heavily at the time; but imperious hunger brooked no delay. At length the girls returned with a good bundle of this *poro* to an open shed used as an oven-house. Taike threw off her *tiputa*, or upper garment, to dry it, whilst her cousin ran to help her mother, who was driven by hunger to pluck off the faded yellow stems (*aa*) of the taro, after the green nutritious leaves had been gathered. These half-withered stems, with the *poro* already gathered, were to suffice for their scanty morning meal. Taike took a stone axe, and with it began to split firewood for heating the stones.

Just then Vaere, who from the hibiscus bush had watched all three, came along the narrow pathway towards the oven-house, unperceived by his intended victim. The poor woman, who had been gathering sere taro stems, at once suspected his errand, and, hastily telling her daughter to look after the precious food, followed Vaere, entreating him to spare Taike. Without deigning a reply, the warrior quickly entered the shed where the unsuspecting girl was at her work, and roughly grasped her hand. The weeping aunt of Taike, seeing that she could not save her, with the instinctive love and pride of native women, got her

best petticoat and wrapped it round her. The unhappy girl was then dragged by one hand outside the oven-house, and through the extensive taro plantations, to the place agreed upon. Her loud cries and bitter tears at her hard fate did not move his compassion. As she was being dragged on to her death, she ceased not despairingly to beckon with her unfettered arm to her terrified cousin in the taro patch, as she vainly called for help.

The armed men in ambush now left their post, and rushed forward for the honour of spearing the inoffensive girl; as the actual murderer invariably obtained lands and distinction. Great care, however, was requisite in slaying victims not to batter them too much, as Rongo would thereby be insulted. As Taike fell, their infernal war dance was performed in triumph. It is expressly said that she was at once carried to the great *marae* on the west of the island, borne between two men on a spear.

According to custom, the drum of peace was now beaten, and human life again became 'sacred,' in virtue of this sad offering to Rongo. The ears of Taike were of course divided out to the various chiefs and land-owners, as a sort of investiture, in the name of the supreme god of Mangaia. Her nose was cut off and divided amongst 'the kings,' or spiritual sovereigns of the island, as their share and title to office as high priests of Rongo.

Vaere was really a warrior. In two subsequent battles he slew several persons, whose names are well remembered. But for the arrival of Christianity, there can be no doubt that vengeance would have been wreaked upon him on account of the many who had

fallen by his hand. I can honestly affirm that, during the two years and a half that I knew him, I never saw anything amiss in his conduct, or even anything to indicate cruelty of disposition.

A Polynesian Pastor.—The *lex talionis*, or law of blood revenge, was one of the principal reasons why the South Sea Islanders were rapidly degenerating when Christianity arrested their downward progress. In order that the duty of revenge might not be forgotten, it was customary to make tattoo marks on the throat and arms. If the person or persons escaped during the offended man's lifetime, he gave the same injunctions to his children at his death: thus it was handed down from generation to generation, until the lust of revenge was satiated.

Tuaivi, a lesser chief and a noted warrior of Ngatangiia, a district on the south-east of Rarotonga, had been enjoined by his father to seek revenge on a family living at Arorangi (a distance of some five or six miles), who had killed some of his near relatives. Tuaivi, having received his dying father's charge, narrowly watched the family. One day the doomed man, accompanied by five sons and a daughter, paid a visit to Pa, one of the great chiefs of Ngatangiia. On their way back to Arorangi, when near the boundary line of the two districts, a party of armed men, retainers of Tuaivi, rushed out of the hibiscus bush which there grows almost to the water's edge, and cut off their retreat. In the *mêlée* the father was slain, much to the regret of the killing party, who had been strictly enjoined 'to lead them to Tuaivi alive.' A strip of green hibiscus bark was tied round the ankles of their victim, and the corpse dragged through the

still waters of the lagoon, followed by the weeping children. Arrived at Tuaivi's land, that chief slew all the five sons with his own hand for the luxury of revenge, the sister being spared as his slave. One little fellow, seeing the slaughter of his elder brothers, ran to Tuaivi and crouching down said: 'Won't you let me be a slave to your children,—to cook their food, to fetch their water, etc.?' The only reply to this pathetic entreaty was that he was dragged away, clubbed, and cooked with the rest! Thus father and sons were cooked in the same oven, and devoured by Tuaivi, his son Maretu, and their dependants. On that occasion Maretu greatly offended his seniors by hiding away the head of a victim as a secret morsel.

At the period of this tragedy the existence of the savage island of Rarotonga was unknown to the civilised world. Not very long afterwards the martyr Williams discovered the island and landed Christian teachers on its shores. English missionaries followed in the train of native pioneers, and their labours were greatly blessed. Truly the ways of God are past finding out; for this same Tuaivi became a convert. He became ashamed of his past life, and sought earnestly for pardon and peace through the Crucified One. He became the real friend and helper of his missionary, the Rev. C. Pitman. He was distinguished by activity in everything good. When a chapel, school, or manse was erecting, he was always at his post as a lesser chief—the first to come and the last to leave. He was about to be admitted to the Church by baptism, when he was called from earth to heaven.

The poor slave girl became free through the truth.

But the most interesting circumstance of all is this,

that Maretu—a lad when Tuaivi enjoyed his revenge—not only became a Christian, but, educated by Mr. Pitman, became eventually his valued assistant in preaching the gospel of peace to his countrymen. Hundreds attributed their conversion to the preaching of Maretu.

In 1839 he was appointed to Mangaia, and did excellent service there. Not a few were savingly converted to God through his preaching.

Whilst there his left hand was blown away in a gun accident. On this account he was often playfully called 'the one-handed.'

In 1852 Maretu performed a similar good work on the low coral islands of Manihiki and Rakaanga. He was sent by the brethren to form a Christian Church, to watch over its infant growth, and to establish social order on a Christian basis.

In 1854, upon the retirement of the Rev. Charles Pitman, Maretu was appointed his successor, and continued to labour on to the end with much acceptance. Twice or thrice during his long illness (six months) he was borne by the deacons to church on a couch, and in this way was enabled to plead with the people about eternal things, as in sight of the judgment-seat he besought them to give their hearts to Christ.

On Sabbath morning, January 25th, 1880, he passed away to his rest and reward, being at that time the senior native pastor of the group. He had publicly expressed the wish that the Lord's-day might be the time of his dismissal.

At the time of his death, Maretu must have been about seventy-eight years of age. He was distinguished

by power of intellect, combined with true humility and utter guilelessness. He was of quick perception and ready sympathy. He had a beautiful expression of countenance; he gave me an impression of saintliness beyond any other native. He was eminently a man of prayer and faith. He truly adorned the doctrine of God our Saviour in all things. His removal is mourned by all. During his sickness I often visited him, and never left him without being impressed by his piety and good sense. On one occasion he remarked to me with great emphasis, 'I want to live on until each member of our tribe has given his (or her) heart to Jesus; *then* I can go in peace.' His last words were 'May God dwell in your midst!' He passed away without a sigh or a struggle to that land the inhabitants of which say not they are sick.

Tapairu-ariki, of Rarotonga.—Events having led the late Rev. J. Williams to visit Aitutaki in 1823, he saw a number of Rarotongan women who had been stolen away by a Captain Goodenough, the original discoverer of Rarotonga, and then sent ashore at the next island. Amongst them was a fair young woman, named Tapairu-ariki, cousin of Makea. The atrocious conduct of Captain Goodenough whilst at Rarotonga made him unwilling to report his important discovery to the world; hence it fell to the lot of Mr. Williams to rediscover the island, and give it a place in the charts and commerce of the world. Rarotonga is but a day's sail from Aitutaki, yet after several days had been consumed by Mr. Williams in searching for it, still no land was in sight. When within half-an-hour of relinquishing the search, the crests of lofty mountains revealed the whereabouts of this lovely

island. Tapairu-ariki went on shore with the pioneer teachers, so as to ensure their safety, and to introduce them to Makea. A night of terrible anxiety made some of the teachers abandon their work. However, Papehia volunteered to remain, all alone, amongst a race of cannibals, to preach the glad tidings of the kingdom of heaven. Papehia's helper and protector was this Tapairu-ariki, who became one of the first members of the Church at this village. All through her long eventful life she was the warm friend of the missionary. She was called 'the Mother of the Word of God.' She was a woman of great energy and spotless character after her acceptance of the truths of Christianity. It is about twenty-nine years since I first became acquainted with her; I never saw or heard anything that was inconsistent with her profession of love to Christ. Her near relationship to the governing family gave her a right to speak out when anything was amiss. She often spoke to good purpose.

Although for many months her health was failing, it was not until her last sickness that her place in the house of God was ever empty. On Saturday, February 19th, 1881, she gently fell asleep in Jesus. I often visited her during her illness. She was longing to depart and be with Christ. On one occasion I expressed a hope that her children (grey-headed old men) from Aitutaki would be permitted to see her again. She quietly said, 'It is well with them, for they are serving Christ. Do not detain me by your prayers and kind wishes. Let me go quickly to the Saviour, whom I have loved so long.'

The day after her decease being the Lord's day, instead of the ordinary routine I preached a funeral

sermon for her from Rev. xiv. 13. At the close I invited the congregation to follow me to the grave. It was a striking sight—six hundred people crowding silently around the open tomb, in respect for the memory of Tapairu-ariki. We sang Mr. Buzacott's excellent native version of 'When I can read my title clear,' etc., when the aged uncle of Makea concluded with prayer. At her special request the grave was dug at the base of the cenotaph erected to the memory of the martyr Williams. I do not think any present on that occasion will ever forget the solemn scene.

Tapairu-ariki's age at the time of her death must have been about eight-five, as she lived to see her descendants of the fourth generation, she being the fifth. Her teeth were perfect. Her hands, on the back, were beautifully tattooed; hence most strangers imagined that she wore mittens! She was one of the most remarkable women of the South Pacific. Her history is the story of a race emerging from darkness and cruelty into the light and peace of the Gospel.

Death of a Christian Chief.—Ata,[1] chief of Keia, was long sick. I always felt it a pleasure to converse with him on sacred subjects. His mind was in a most enviable state, his prevailing wish being to depart and to be with Christ; or, as he one day said to his wife, he longed 'to see with his own eyes the Lord Jesus,' and so to realize all that he had heard and read of in the Word of God. I have, since his decease, heard that his last charge to a brother chief was, 'to see that no evil befell the missionary or the Word of God,' and that the latter should be *ei toke i te enua nei*, i.e., 'a native of

[1] This is the 'Little Ata' referred to in the 'Lament' for his grandfather Ata in *Savage Life in Polynesia*, p. 220.

the soil' (literally, 'a worm of the soil'). At the new year he rose from a bed of sickness in order to be present at our large gathering, and addressed our people for the last time. His words were heard with much respect, as if coming from the tomb. The one idea was to entreat the younger portion of the population cordially to embrace the Gospel, and worthily to occupy the place of those who were passing away.

Of the numerous death-beds of native Christians I have witnessed, I should say that Ata's was the most enlightened and peaceful. No doubt or fear obscured the glory of this Christian sunset. Ata passed away without a sign or a groan, on Sabbath morning, 1st of May, 1870.

Eclipse of the Sun as seen in the South Seas.—On Monday, May 6th, an eclipse of the sun attracted universal attention, as I had previously given notice of it. It was not quite a total eclipse. We watched it from 9.30 A.M. till 11, when clouds quite obscured it. In heathen days this event would have occasioned great consternation. Liberal offerings of food would be carried to the *maraes*, while the priests chanted prayers to Tangaroa in order to get back the sun. It was supposed that the hungry Tangaroa had swallowed the luminary, but that on account of the large presents of food and many prayers he vomited the bright morsel up again! So completely has heathenism died out, that I did not hear allusion to the firm belief of past times.

Tahiti.—In the pulpit of the Romish cathedral at Tahiti is a copy of the Tahitian Bible, translated by Mr. Nott, one of the early missionaries, and printed by the British and Foreign Bible Society. When a

traveller expressed surprise that a Bible translated by a Protestant should be there, a native curtly remarked, 'But for that Bible, no native would enter the place at all.' After forty-one years of French 'occupation' there are only about three hundred Romish native converts on Tahiti and a sister island Moorca.

White Cannibals.—Leaving Aneiteum for Samoa (in 1862) in the first John Williams, we noticed a strange-looking fellow at the wheel. Somewhat below the middle height, he excited the wonder of all by the tattooing on his arms, neck, and part of his face. The cold, feline expression of his eyes, as if ever on the watch, was anything but agreeable. He proved to be John Jackson, of Ardleigh, in Sussex, whose earlier experiences form an appendix of tragic interest to Admiral Erskine's *Cruise among the Islands of the Western Pacific*. On the third day after leaving port, Jackson was reported to the captain as sick, and I was requested to ascertain whether this was really the case. A few minutes' conversation sufficed to prove that he was hiding away merely to avoid the jibes and scorn of his fellow-sailors, especially of one who had known him on board the Havannah.

With much pride, Jackson took out of his chest and placed in my hands a beautifully-bound copy of *The Cruise of the Havannah*, for which he had paid a guinea, and requested me to read the story of his earlier adventures. Of his later experiences in New Caledonia, &c., he gave many curious details. He was not ashamed to avow that he had lived nude, exactly like the surrounding heathen, and removed part of his clothes to show the curious tattooing on his person. He had taken part in their wars, had formed ephemeral

matrimonial connections wherever he had settled, and had freely partaken of their horrid banquets. It was the knowledge of this amongst the sailors that originated the scorn under which he writhed.

When at New Caledonia, Jackson was concerned in the capture of two or three whalers, in which he acted the part of a decoy-bird. Several sentinels were despatched by him, so that the French authorities rightly resolved to put an end to the career of this tattooed renegade, who found it advisable to make his way by night in an open boat to Aneiteum—a perilous voyage. Even there he deemed his life unsafe. The John Williams touching there, he begged to be permitted to work his way to Samoa.

In consequence of head-winds, three weeks elapsed ere we reached Apia. After reporting himself sick, Jackson never appeared on deck even for a few minutes by daylight. When anchor was cast at Apia he went ashore by stealth after dark. We all felt it to be a good riddance. At Apia, being hard up, he engaged to do some work for the French priests; but a friend giving him a hint that a French war-steamer was daily expected from New Caledonia, Jackson threw up the job, crossed the channel to Savaii in a small canoe, and disappeared in the almost inaccessible mountains of that magnificent island. A month afterwards, on my return from the Tokelau group, the fugitive had not come out of his hiding-place; but no one doubted that he would again turn up. Let us charitably hope that in the silence of the primeval forest the words he heard on board the mission bark were remembered to profit.

Old Habits.—One evening when two of my

brethren were discussing the question, 'Do converted cannibals ever experience a return of the old craving?' —a disciple and warm personal friend of the resident missionary entered the room. This man had formerly been a celebrated warrior and cannibal, but for several years past a consistent professor of Christianity. When the business on which he came was over, the question was put point-blank to him, 'Do you ever get a return of your old savage appetite?' The man was evidently very much taken aback at the inquiry. Glancing from one to the other, and then at the door, to be sure that it was shut, he asked, 'Do you wish me to tell *all?*' 'Certainly,' said his pastor. Scratching the floor with his finger-nails, he again inquired, 'Down to the very bottom' (literally floor) 'of my heart?' 'Most assuredly,' replied my brother. 'Well then,' said the old warrior, 'I *do* occasionally; but when this terrible feeling comes over me, I go into the forest, where, unheard by fellow-mortals, I pour out my cries and tears before God. Nor do I go home until I have gained a complete victory. The temptation, however, returns at increasingly distant intervals; and the struggle, when it does come, is of briefer duration.'

A Reminiscence.—In 1857 the writer removed from his old station to the principal settlement on the island of Mangaia. Just then the Rev. and Mrs. G. N. Gordon visited us on their way to Erromanga, where, four years later, both were cruelly slain by the heathen. Very earnestly did the villagers entreat Mr. Gordon to become my successor. The senior deacon clinched his arguments by seizing him by the arm and begging him not to take his wife where possibly both might

share the fate of the martyr Williams. I was much moved; but Mr. Gordon's calm reply was merely this: 'Tis as the Master wills—to live or die!'

In his subsequent address in the church (I was his translator), he remarked that religion may be compared to a cocoa-nut. The husk of ignorance must be removed, and the hard shell of the love of sin must be broken by the hammer of the Word, ere the blessing could be obtained; once secured, it is indeed meat and drink to the perishing soul.

Prayer.—The natives of Mangaia tell a pretty fable of a beautiful maiden, named Ina, who was miraculously borne over the ocean to the palace of her divinely-chosen husband, Tinirau, king of Rarotonga. Alone in the spacious dwelling, spotlessly clean and adorned with savage finery, she espied a magical drum, beautifully carved with sharks' teeth.

Now Tinirau was by design at a distance, hiding in the primeval forest. To while away the time, Ina—a proficient in the art—beat the drum with her hands. Such was its wondrous virtue, that its sweet sounds speedily brought the king to his bride.

So runs the ancient myth. But is not the Church the pre-destined bride of the Lord Jesus? We dwell in the palace of a great King; but as yet we see Him not, although surrounded by many proofs of His care and love. Prayer is the magic drum, ever at our service; the faintest touch of it is sure to enter into the ears of the Lord of Sabaoth and bring Him to our side.

'EVEN SO, COME, LORD JESUS.'

INDEX.

Adzes, stone, on Palmerston's Island, 37
——, legends, of, 223
Akaina, story of, 48
Anataketake, the cavern, 46
Apai, story of, 119
——, proverb of, 121
Araeva, battle of, 69
Arapoiri, story of, 227
Areca palm, the, 209
Arorangi, cannibal oven at, 92
Artocarpus integrifolia, 179
Ata, death of, 239
Ati, lament of, 68
Atiu, visit to, 39; discovery of, 39; welcome to, 40; vegetation of, 41; village of, 41; houses of, 42; subject islands of, 43; feast on, 43; Sabbath on, 44; native pastors of, 45; caverns of, 46; legend of, 46; visit of Rev. J. Williams to, 56
Atua, King, visit to, 23
Avirikuto and his brother, legend of, 85

Backsliding, 117
Banyan tree (*Ficus prolixa*), description of, 9, 172; legend of, 62
Baracoota, cry of, 157
Barringtonia speciosa, poisonous juice of the nut of, 140, 142; description of, 198
Bathing, fatal consequences of, 16
Bible, illustrations of, 83
Bible in Tahitian R. C. Cathedral pulpit, 240
Birdlime, 78
Bird-snaring, 77
Birds, land, decrease of, 127
Bonito (*Thynnus pelamys*), 157
Born of a woman, 113
Bread-fruit tree (*Artocarpus incisa*), description of, 175; mode of preparing, 177; caoutchouc from, 178; cloth from, 179

Candle-nut tree (*Aleurites triloba*), 191
Cannibal cravings, 243
Cannibals, white, 241
Canoe-launching, 115
Caoutchouc from bread-fruit tree, 178
Copra, trade in, 207
Cats, increase of, 127
Cave of the Tern, legend of, 64
Cerbera lactaria, 142
Chesnut (*Inocarpus edulis*), 194
Clams and clam diving, 151
Closing the eyes in prayer, 88
Cloth, native, from bread-fruit tree, 179
Cocoa-eating *Lopaphus*, 158
Cocoa-nut palm, description of, 202
Conscience, an awakened, 92

Death, illustration of, 116
Departing year, voice of the, 84
Disappearance of islands, reported, not true, 215
Divided heart, a, 115
Drunkard's confession, a, 90
Ducks, wild, 114

Easter Island, gods of, 213

Eclipse of the sun, native explanation of, 240
Eke, adventures of, 63, 65, 66, 67, 68
—— baptism of, 69
Entada scandens, 171

Fagræa Berteriana, 189
Faith, mature and immature, 77
——, true, illustration of, 98
Fan palm tree, 210
Farewell, a, 115
Feeble, work for the, 81
Fish, a poisonous, 134
Fish diet, 223
Fish, native mode of killing, 158
Fish poisoning at Rarotonga, 140
Fishing at Penrhyns, 145
Fleas in Polynesia, 163
Foilangi, god of Nanomanga, 21
Freycinetia Banksii, 188
Frigate-bird, uses of, 17
Funeral customs, 87

Ghost Cave, the, 66
Gods, stone, 213; wooden, 214
Gordon, Rev. and Mrs. G. N., heroism of, 244
Grasshoppers, Rarotongan, 164
Guilt, human, 87

Hawk Fishing, 92
Heathen, the, 113
Hell, the Rarotongan, 88
Hernandia peltata, 41
Heroism, Christian, 81
Hibiscus esculentus, 201
Hibiscus rosa sinensis, 201
Hibiscus tiliaceus, 199
Hosea ii. 7, illustration of, 94
Hosea vi. 4, illustration of, 104

Idol-houses on Niutao, 15
Impenitent, the, 77
Ina, story of, 107
Inseparables, the Legend of, 111
Inutoto, legend of, 46
Ioana, reception of, on Nanomanga, 24; destruction of idols by, 25; ordination of, 26
Ioi, snaring of, 78
Itieve, story of, 100
Ivirua, visit to, 61; scenery of, 61
Ivory palm, the, 210

Jackson, John, career of, 241
Jeremiah viii. 20, illustration of, 86
Jeremiah xii. 5, illustration of, 95

Kairae, story of, 54
Kakirori, the, 128
Kapua, story of, 67
Kariuna, murder of, 106
Kekeia, story of, 100
Kiekie (*Freycinetia Banksii*), 188
Kingfisher, Polynesian, habits of, 99
Kirivari, murder of, 68
Kokiri, cry of, 156
Kraken, the, 144
Kukukina, cry of, 156

Lemon hibiscus (*H. tiliaceus*), 199
Lianas, or climbing plants, 170
Life, illustration of, 92
Linnet, Polynesian, habits of, 99
Literalism, native, 81
Living God, the, illustration of, 110
Living Water, 89
Lopaphus coccophagus, 158
Loranthus insularum, the, 84
Lost soul, a, 102
Luke xix. 3, illustration of, 98

Maiti, story of, 53
Makitaka's sacrifices to Rongo, 230
Mamekai, story of, 90
Man-hunt, a, 52
Manarangi, address of, 84
Mangaia, coral reefs of, 110

Manihiki natives on Nassau, story of, 29
Maputu, *marae* of, 64
Maretu, a native pastor, 236
Mat-tree (*Pandanus utilis*), 187
Mauke, Akaina's visit to, 48; man-hunt on, 52; slaughter on, 55; author's visits to, 56; welcome to, 57; cyclone on, 57; feast on, 58; Sunday on, 58; schools on, 60
Maumau, god of Nanomanga, 21
Mauri, adventure of, 65
Metaphor, a bold, 83
Mist Mountain, the, 89
Mistletoe Christians, 83
Moanakino, story of, 225
Mollusca of Hervey Islands, 145
Moonstruck, 215
Mosquito, the, 162
Moss-grown cave, the, story of, 66
Motoro, the god, 110
Mullet, 141
Muræna, habits of, 150
Musical stones, 64

Nanomanga, visit to, 19; heathen king of, 19; heathen conference on, 20; gods of, 21; temples on, 22; house of king of, 23; Gospel accepted by natives of, 24; destruction of gods on, 25; grave of heathenism on, 26; triumph of the Gospel on, 26
Nanue, the, 141
Nassau, visit to, 28; description of, 28; reef of, 29; refugees on, 29; vegetation of, 30; recent visits to, 31; present condition of, 31
Ngaapaimar, story of, 119
Ngana, story of, 108
Nights, reckoning by, 222
Niutao, etymology of, 11; heathen worship on, 12; lagoon of, 12; conversion of natives of, 12; Sabbath observance on, 13; substitutes for bread and wine, 13; food on, 13; houses on, 14; burial ground on, 14; a dead level, 14; idol-houses on, 15; well on, 16; heathen customs on, 16; modes of counting by natives of, 17; frigate-bird tamed on, 17; no forced converts on, 17
No'u, the poisonous fish, 134
Nurse, a, grave of, 61

Obsidian on Easter Island, 215
Octopus, climbing, 187; gigantic, 144
One-oven, story of, 121
Ono, legend of, 95
Outrigger, the, 98

Palmerston's Island, situation of, 33; scenery of, 33; discovery of, 34; inhabitants of, 34; fishes of, 35; horses on, 36; stone adzes on, 37; birds of, 37; drawbacks of, 38
Papaw apple-tree (*Carica papaya*), 181
Papehia, labours of, 238
Parleying with the tempter, illustration of, 107
Parrot fish (*Scarus harid*), 35
Paste, Polynesian, 115
Pearl-fishing at Penrhyns, 150
Penrhyns, fishing at, 145
Perishing heathen, the, 85
Peû, legend of, 95
Phasma, the, 158
Pigs, foster-mothers of, 165
Platforms, native, 87
Poisoning of fish at Rarotonga, 140
Porpoises at Penrhyns, 126, 147
Potiki, story of children of, 111
Prayer, heathen idea of, 225
——, illustrations of, 76, 80

Prayer, native, fable illustrating, 244
—— on extraction of tooth, 222
Prayers, native, 117
Preaching, Polynesian, 73
Prophesying, native, 116
Proverbs, Rarotongan, 88
Psalm cxxv. 2, illustration of, 110
Pua tree (*Fagræa Berteriana*), 189

Rākoa, cry of, 156
Rats, decrease of, 127
Reckoning by nights, 222
Riddles, Polynesian, 217
Robber-crab (*Birgus latro*), the, 165
Rock-fish, the, 93
Roma-Tane, vengeance of, 55; conversion of, 56
Rongo, sacrifices to, 105, 226, 230
Rongotini, visit to the chief, 42
Ruaatu, offerings to, 103

Sabbath, a well-spent, 94
Sanctifier, the, 77
Scævola on Nassau, 30
Screw-pine (*Pandanus odoratissimus*), 183
Sea-horse, the, 221
Seal, the fur, 125
Selfishness, illustrations of, 82
Sermons, native, 74
Shark, fishing for, 148
Solanum oleraceum, 120
Spectre insect, the, 158
Spondias dulcis, 201
Sting ray, the, 131
Strait gate, the, illustration of, 93
Sun-fish (*Orthagoriscus*), 142
Sword-fish (*Xiphias gladius*), 137
Synanceia verrucosa, 137

Tahitian Bible in R. C. Cathedral pulpit, 240
Taike, story of, 231
Tane, birds sacred to, 99
Tangaloa, god of Niutao, 12
Tapairu-ariki, story of, 237
Taraaere's story, 119
Tararo, story of, 53
Teatuapai, battle-field of, 64
Temo'o, story of, 90
Tephrosia piscatoria, 142
Terango, story of, 226
Teriaitaiti, king, anecdote of, 81
Teu, grove of, 65
Tiki, offerings to, 87
Timapere, *marae* of, 64
Timoteo, adventures of, on Nanomanga, 19; story of, 20
Tinomana, installation of, 88
Top shells, hardness of, 89
Tournefortia on Nassau, 30
Trials, 80
Tropic-bird (*Phaëton æthereus*), 37
Tuaivi, story of, 234
Turtle at Rakaanga, 128; at Penhyns, 146

Ume, cry of, 156
Unrenewed heart, the, 113

Vaangaru, story of, 227
Vaere, story of, 230
Vai-tiria, story connected with, 63
Vaitamana, story of, 105
Vakatini, speech of, 78
——, kindness of, 120
Vete, cry of, 155
Vi-apple (*Spondias dulcis*), 201
Voice in fishes, 155

Warning despised, 99
Wasp, solitary, of the Hervey Islands, 161
Watchfire, the, 79

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